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FOREWORD

Homeland defense is a vital aspect of our national security strategy. In recent years, threats against the homeland have become the greatest danger to national security. The documents included within this edition of *The DTIC* Review* seek to provide some clarity regarding current homeland security policies, doctrine for carrying out these policies, and potential improvements to the current homeland defense strategy.

The editorial staff hopes you find this effort of value and appreciate your comments.



Kurt N. Molholm
Administrator

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TABLE OF CONTENTS

INTRODUCTION.....	1
DOCUMENT 1.....	2
AD Number:	A388944
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DOCUMENT 2.....	3
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DOCUMENT 4.....	5
AD Number:	A387385
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Unclassified Title:	CONPLAN – United States Government Interagency Domestic Terrorism Concept of Operations Plan
Report Date:	2001
DOCUMENT 5.....	6
AD Number:	A381874
Corporate Author:	Army Command and General Staff College School of Advanced Military Studies Fort Leavenworth, KS
Unclassified Title:	Doctrine for Domestic Disaster Response Activities
Report Date:	2000
ELECTRONIC REFERENCES.....	7
ADDITIONAL REFERENCES.....	10

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INTRODUCTION

The US homeland includes the United States, its territories, embassies and Outside the Continental United States (OCONUS) military bases and vessels. Homeland security policies incorporate prevention and response measures for both natural and human-initiated domestic crises. Recent threats to our homeland security include the attack on the USS Cole, the simultaneous bombings of US embassies in Nairobi and Dar es Salaam, Hurricane Marilyn and the Oklahoma City bombing. Each of these crises endangered aspects of our national infrastructure and required immediate and decisive responses to alleviate the breach in national security.

Unfortunately, the number of threats against US national security is on the rise. In recent years, threats against the homeland have become the greatest danger to national security. The United States is perceived by many to be both the world's police force as well as its only superpower. In these capacities the United States has developed a large number of enemies, both state and non-state. These enemies have come to realize that they can influence US policy most effectively through acts and threats against the US homeland. It is therefore imperative for the United States to develop a comprehensive homeland security policy.

At this time there are several government and military organizations involved in homeland security, including the Federal Emergency Management Agency (FEMA), the Federal Bureau of Investigation (FBI), the National Security Agency (NSA), the National Guard and other active and reserve branches of the Armed Forces. While each of these organizations plays a role in homeland defense, it is difficult to assess where one organization's jurisdiction ends and another begins. The documents included within this edition of the DTIC[®] Review seek to provide some clarity regarding current homeland security policies, doctrine for carrying out these policies, and potential improvements to the current homeland defense strategy.

The selected documents and bibliography are a representation of the material available on homeland defense from DTIC's extensive collection. Additional references, including electronic resources, can be found at the end of the volume. In-depth literature searches may be requested by contacting the Reference Team, Network Services Division at the Defense Technical Information Center: (703) 767-8274/DSN 427-8274; FAX: (703) 767-9070; E-mail: bibs@dtic.mil

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DOCUMENT 1

Combating Terrorism: FEMA Continues to Make Progress in Coordinating Preparedness and Response

AD-A388944



March 2001

**General Accounting Office
Washington, DC**

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March 2001

COMBATING TERRORISM

FEMA Continues to Make Progress in Coordinating Preparedness and Response



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GAO

Accountability * Integrity * Reliability

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Contents

Letter	3
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Appendixes	
Appendix I: Federal Emergency Management Agency Programs With Well-Established Consequence Management Exercise Practices	24
Appendix II: FEMA's Terrorism Preparedness Training Program	31
Appendix III: Comments From the Federal Emergency Management Agency	39
Appendix IV: GAO Contacts and Staff Acknowledgments	40

Tables	
Table 1: Courses and Students in the Integrated Emergency Management Course: Consequences of Terrorism	13
Table 2: Typical Special Events in Which FEMA Participated	15
Table 3: Nominal Participants in the Integrated Emergency Management Course: Consequences of Terrorism, by Discipline and Position	34
Table 4: FEMA's Emergency Response to Terrorism Courses and Curriculum Aid	37
Figure 1: States With Emergency Operations Plans That Reflect the Federal Response Plan	9
Figure 2: States With Emergency Operations Plans That Incorporate Terrorism Preparedness	10
Figure 3: Terrorism Preparedness Exercises in the States, by Exercise Type (1996-2000)	18
Figure 4: FEMA Terrorism Preparedness Exercise Participation, by Focus (1996-2000)	19
Figure 5: Hazardous Material Decontamination Team in Aurora, Colorado, During TOPOFF 2000	20
Figure 6: Operations Group Dispatchers During the Consequences of Terrorism Course Exercise	21
Figure 7: FEMA Exercise Program Funding, by Major Category	29
Figure 8: FEMA Exercise Program, by Major Category	30
Figure 9: Locations of Workshops on Terrorism for Senior Officials (1996-June 2000)	32
Figure 10: Locations of Courses on Weapons of Mass Destruction (1996-June 2000)	33
Figure 11: Locations of and Participants in the Integrated Emergency Management Course (1996-June 2000)	36

Contents

Abbreviations

CSEPP	Chemical Stockpile Emergency Preparedness Program
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
PDD	Presidential Decision Directive
REP	Radiological Emergency Preparedness Program



United States General Accounting Office
Washington, D.C. 20548

March 20, 2001

The Honorable Donald Young
Chairman
The Honorable James Oberstar
Ranking Democratic Member
Committee on Transportation and Infrastructure
House of Representatives

The threat of terrorist attacks within the United States has been an issue of growing national concern. In April 1995, terrorists struck Oklahoma City with a bomb in front of the Alfred P. Murrah federal building, killing 168 people and damaging a 48-block area. The Federal Emergency Management Agency (FEMA) coordinated the federal agencies' assistance in response to that terrorist act. Two months after the attack, under Presidential Decision Directive (PDD) 39, the President formalized FEMA's lead role in managing federal agencies' assistance after a domestic terrorist incident and required FEMA to take several actions to increase its effectiveness and that of other responsible agencies and the states in responding to domestic terrorism. These actions included updating the Federal Response Plan,¹ assessing the capabilities of states and local governments to respond to a terrorist incident, and ensuring that states' response plans were adequate and tested. In May 1998, the President issued PDD 62, which reaffirms PDD 39 and further articulates the responsibilities of specific agencies.

State and local governments exercise primary authority in responding to the consequences of terrorism; the federal government provides assistance as required. FEMA's role in "consequence management" is to participate in and lead other agencies' assistance in protecting public health and safety; restoring essential government services; and providing emergency relief to state and local governments, businesses, and individuals after a terrorist incident. PDD 39 reaffirms the Federal Bureau of Investigation's (FBI) lead

¹ The Federal Response Plan (updated in Feb. 1997) sets out policies, procedures, and responsibilities of federal departments and agencies and the American Red Cross for helping the states deal with major domestic disasters or emergencies such as floods and hurricanes. It did not include a section on dealing with terrorist events at the time of the Oklahoma City bombing incident.

responsibility for "crisis management."² FEMA also develops strategies to enhance the federal government's capability to support state and local governments in dealing with the consequences of a terrorist incident involving a weapon of mass destruction.³

As requested by the former Chairman, Subcommittee on Oversight, Investigations, and Emergency Management, we reviewed FEMA's actions to improve its capabilities to respond to terrorist incidents based on its response to lessons learned from the Oklahoma City bombing, requirements in PDDs 39 and 62, and its own guidance. Specifically, we determined the extent to which FEMA has (1) incorporated the lessons learned from the aftermath of the Oklahoma City bombing, (2) ensured the preparedness of states and federal agencies to respond to terrorist incidents, and (3) ensured that states' plans are tested through exercises.

Results in Brief

In policy and practice, FEMA has generally addressed the key lessons learned from its experience in coordinating federal consequence management activities after the Oklahoma City bombing. In analyzing the lessons learned after the bombing, FEMA identified three major actions that needed to be taken: (1) create guidance to facilitate agencies' coordinated response to terrorist events, (2) ensure that state and local emergency plans mirror the Federal Response Plan, and (3) establish an adequate number of emergency response teams to deal with mass casualties. Improvements in these areas have been made across the board. FEMA has updated the Federal Response Plan to address how federal agencies, states, and localities would work together to respond to an act of terrorism, and states are increasingly modeling their emergency operations plans on the federal plan. Also, the number of teams available for emergency response to deal with mass casualties has doubled since 1995.

² The FBI has the lead role for domestic crisis management, which includes efforts to stop a terrorist attack, arrest terrorists, and gather evidence for criminal prosecution. When terrorist attacks occur without adequate warning, crisis management and consequence management are concurrent activities.

³ FEMA's Terrorism Preparedness Strategic Plan defines a weapon of mass destruction as any device that is intended to or can cause death or serious bodily injury to a significant number of people through (1) conventional explosive effects, (2) release of toxic or poisonous chemicals or their precursors, (3) a disease organism, or (4) radiation or radioactivity.

In response to a PDD 39 requirement and to ensure that states are prepared to respond to a terrorist incident, FEMA assessed states' capabilities for consequence management in 1995 and set up a system to continue monitoring those capabilities. In 1997, FEMA reported to the Congress and to the President⁴ that the states had the basic capabilities to respond to disasters but were not well prepared for a terrorist incident involving a weapon of mass destruction. The agency has also expanded terrorism preparedness training grants and systematically incorporated terrorism preparedness courses into its emergency management curriculum. On the federal level, FEMA coordinates extensively with other involved agencies on key, national-level terrorism preparedness guidance and policy documents and on activities, as required by PDDs 39 and 62. The agency also participates in numerous operations and special events designed to enhance the security of domestic events.

FEMA's principal mechanism for testing states' plans is through exercises, some of which FEMA supports with grants. For example, from 1996 through 2000, FEMA sponsored 22 of the 28 terrorism preparedness exercises held in Washington State. Through FEMA's efforts, and those of other agencies, the types, numbers, and complexity of terrorism preparedness exercises have increased significantly. Also, states' terrorism preparedness programs are maturing and they increasingly reflect awareness of federal and state roles in terrorism preparedness and response.

Background

The bombing of the World Trade Center in New York City in 1993 and the Murrah federal building in Oklahoma in 1995 raised concerns about the vulnerability of the states to terrorist attacks. After the 1995 attack on the Murrah building, the President established the general U.S. policy, in PDD 39, to use all appropriate means to deter, defeat, and respond to all terrorist attacks. PDD 39 directs all federal departments and agencies to take measures to (1) reduce vulnerabilities to terrorism, (2) deter and respond to terrorism, and (3) develop effective capabilities to prevent and manage the consequences of terrorism. PDD 62 (May 1998) reaffirmed PDD 39 and set up an integrated program to increase the federal

⁴ *Report to Congress on Response to Threats of Terrorist Use of Weapons of Mass Destruction* (Jan. 31, 1997) and *Report to the President: An Assessment of Federal Consequence Management Capabilities for Response to Nuclear, Biological, or Chemical Terrorism* (Feb. 1997).

government's effectiveness in countering terrorist threats against the United States; it also clarified the roles and activities of many of the agencies responsible for combating terrorism.

The Robert T. Stafford Disaster Relief and Emergency Assistance Act (P.L. 93-288, Nov. 23, 1988), as amended, establishes the basis for federal assistance to state and local governments when they cannot adequately respond to a disaster such as a terrorist incident. After the President has declared a federal emergency, FEMA coordinates its and as many as 27 other federal agencies' responses under the Federal Response Plan. The plan outlines how the agencies will implement the Stafford Act and contains policies and procedures to guide the conduct of operations during a federal emergency. These operations include transporting food and potable water to the area, assisting with medical aid and temporary housing, and providing generators to keep hospitals and other essential facilities working.

Under FEMA's Director, the Senior Advisor for Terrorism Preparedness, a position created in 2000, is tasked to coordinate FEMA's overall terrorism preparedness programs and activities, including budget strategy and formulation. In planning for consequence management, the primary FEMA units involved are the Directorates for Preparedness, Training, and Exercises and for Response and Recovery; the U.S. Fire Administration; and FEMA's regional offices. The directorates and other units are responsible for executing the terrorism-related programs and activities and control the personnel and other resources. The Senior Advisor has no direct management authority over the resources of FEMA's directorates and other units.

FEMA is responsible for leading and coordinating with 27 federal agencies on consequence management activities. These agencies include the Departments of Defense, Justice (the FBI), Energy, and Health and Human Services, and the Environmental Protection Agency. FEMA also works with the states, territories, and communities to help them develop plans for consequence management of terrorist incidents and provides grants for training and exercises to help in preparing them to deal with such incidents.

FEMA's budget for terrorism-related activities has steadily increased over the past 3 years, from \$17.6 million in 1999 to \$28.5 million in 2000 and about \$34.0 million in 2001. A major portion of this funding, about \$20 million for 2001, is in the form of grants to the states and localities.

FEMA Has Responded to Lessons Learned From Oklahoma City Bombing

When the President declared the Oklahoma City bombing a federal emergency, FEMA served effectively as the lead federal agency responsible for consequence management. FEMA established a Regional Operations Center within an hour of the explosion. The prior FEMA Director, James L. Witt, was on the scene the first day and Urban Search and Rescue Teams began arriving within 14 hours. Because the emergency was created by a terrorist attack, however, new and distinct challenges emerged. First, the incident combined a federal crime scene with a disaster area, and second, the swift and catastrophic nature of the bombing thrust FEMA into direct contact with local authorities, causing the agency to bypass many of the customary state channels.

After FEMA had completed its response activities, it assessed its and others' actions to reflect lessons learned from the response to the bombing. The agency found that (1) unclear authority, roles, and responsibilities in the Federal Response Plan and other guidance impeded decision-making and response measures; (2) state and local response plans did not correspond to the Federal Response Plan, which affected operational coordination; and (3) almost all of the available Urban Search and Rescue Teams were used during the incident.

FEMA responded to these lessons learned in several ways. To ensure that roles and responsibilities for managing the consequences of a terrorist incident are clear and to respond to PDD 39 requirements, FEMA—alone or in coordination with other federal agencies:

- updated the Federal Response Plan and added a Terrorism Incident Annex that includes better interagency guidance and describes federal, state, and local policies and the structure for coordinating management of the consequences of terrorist incidents;
- added to the Federal Response Plan four support annexes covering community relations, donations management, logistics management, and occupational health and safety and an appendix, *Overview of a Disaster Operation*;
- developed a Concept of Operations Plan to guide the overall federal response to domestic terrorist incidents and describe actions federal agencies should take nationally and locally;
- established a better liaison between FEMA and local FBI offices and trained staff for liaison positions;

-
- developed terrorism preparedness annexes to support FEMA regions' response plans and provided updates of these plans to federal and state partners; and
 - established a logistics and donations manager as part of the response structure.

To increase awareness of relevant changes to the Federal Response Plan and other guidance and policies affecting consequence management, FEMA

- developed a planning guide to help state and local authorities update their emergency operations plans and to develop terrorism response plans that more closely mirror the federal plan and other guidance in accordance with PDD 39 and
- updated training courses, for example, the Integrated Emergency Management Course, to disseminate current information on plans and response capabilities related to consequence management of terrorist incidents.

FEMA also provides program coordination and grants⁵ to promote the development of emergency management plans, to include terrorism consequence management, at the state and local levels. Federal grants are used to encourage state and local recipients to improve their terrorism preparedness through planning, training, and exercises.

Examples of activities supported by grants include the following:

- development of a comprehensive terrorism preparedness document for inclusion in state emergency operations plans;
- review of state and local emergency plans and procedures to ensure the incorporation of current FEMA and FBI planning guidance;
- state terrorism task force planning;⁶
- development of comprehensive terrorism preparedness training programs;
- test and evaluation of state and local terrorism response plans through multiagency exercises; and

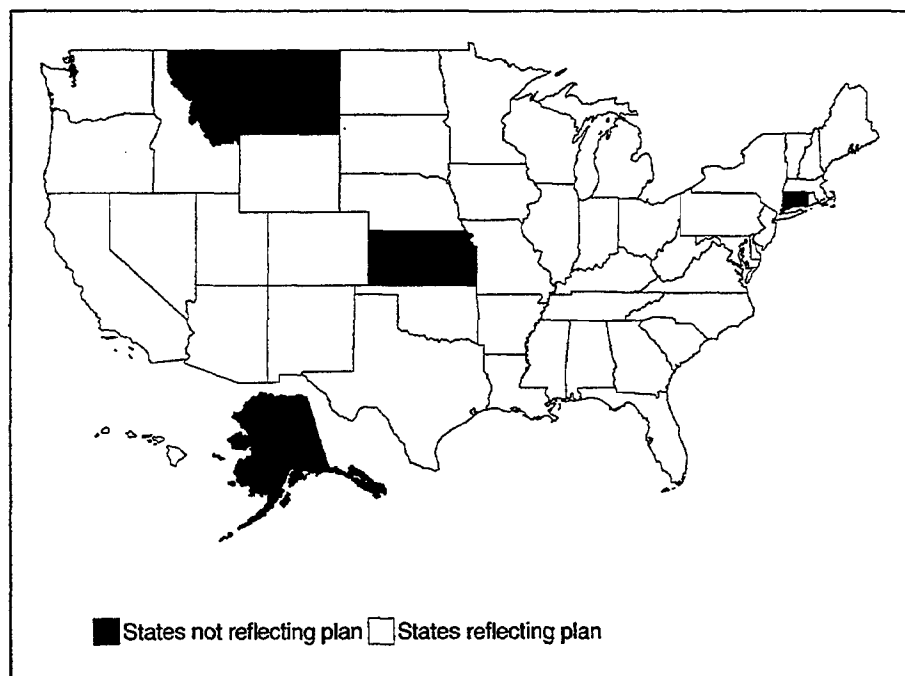
⁵ Grants are awarded to 50 states and 6 U.S. jurisdictions.

⁶ A state terrorism task force may be composed of key state personnel, local fire and police officers, FBI agents, state police special teams, state hazardous material response teams, National Guard officers, and emergency management staff.

- distribution of terrorism preparedness handbooks and/or checklists to first responders⁷ at state and local levels.

Our analysis indicates that most of the states' emergency operations plans reflect awareness of terrorism preparedness and the federal support role. Figures 1 and 2 show, respectively, states with emergency operations plans that mirror the Federal Response Plan and states with plans that incorporate a section on terrorism preparedness. According to FEMA officials, each of the remaining states will likely complete similar updates to their plans within the next 12 months.

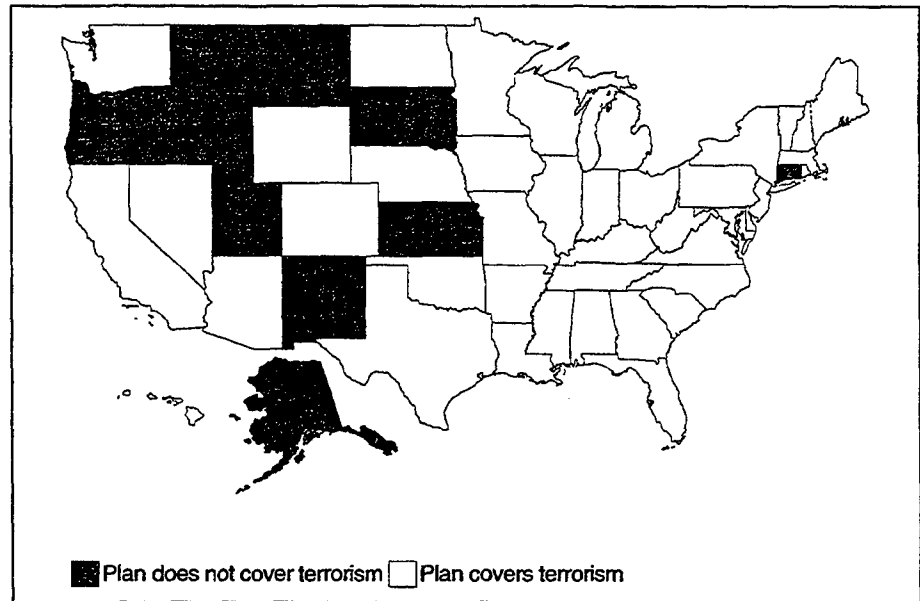
Figure 1: States With Emergency Operations Plans That Reflect the Federal Response Plan



Source: FEMA.

⁷ First responders to disasters include police, firefighters, and emergency medical staff.

Figure 2: States With Emergency Operations Plans That Incorporate Terrorism Preparedness



Source: FEMA.

To respond to the need for more Urban Search and Rescue Teams, FEMA has increased the number of teams from 12 at the time of the bombing, to 28 in calendar year 2000. These 28 teams are comprised of 62 specialists from 4 major functional elements—search, rescue, technical, and medicine. Search specialists use highly trained dogs to find victims under rubble, for example, and rescue specialists determine the best way to free the victims. Technical staffs deal with engineering problems, hazardous materials, heavy rigging, and logistics. The medical staff is comprised of four medical specialists who are often also firefighters and two physicians who are often emergency medicine experts.

FEMA Has Worked to Ensure Preparedness to Respond to Terrorist Incidents

To ensure the preparedness of the states and other federal agencies to handle the consequences of terrorist incidents, FEMA has assessed the states' response capabilities, increased terrorism preparedness training courses, provided training grants, and coordinated extensively with responsible federal agencies on terrorism issues.

FEMA Has Assessed State and Local Response Capabilities

To ensure that states are adequately prepared for a terrorist incident, PDD 39 tasked FEMA to assess the states' response capabilities. Initially, FEMA used the National Governor's Association⁸ to survey the states' capabilities. The Association's primary fact-gathering methodology was focus group discussions with emergency first responders from four metropolitan areas. This survey, which was completed in 1995, concluded that the states' and localities' capabilities could easily be overwhelmed by a terrorist incident. Since then, FEMA and other agencies have worked with state and local authorities to assess the needs of local first responders.

In 1996, in hearings before the Senate Committee on Appropriations,⁹ FEMA's Director committed the agency to (1) developing national-level performance criteria to measure the capability of the states to perform in the areas of mitigation, preparedness, response, and recovery and (2) assessing the states' capabilities to effectively respond to disasters, including terrorist incidents. Subsequently, FEMA and the National Emergency Management Association¹⁰ jointly developed the Capability Assessment for Readiness process and FEMA issued a report on its assessment in December 1997.¹¹ In the report, FEMA concluded that the states have the basic capabilities to effectively respond to disasters but were not well prepared for a terrorist incident involving a weapon of mass destruction.

The report also noted that FEMA's Chemical Stockpile Emergency Preparedness Program (CSEPP) and Radiological Emergency Preparedness (REP) Program provide emergency management performance standards that strengthen related states' programs. FEMA's Terrorism Preparedness Implementation plan states that CSEPP and REP

⁸ The National Governor's Association is a bipartisan national organization of governors of the nation's 50 states; the commonwealths of the Northern Mariana Islands and Puerto Rico; and the territories of American Samoa, Guam, and the Virgin Islands. Through the Association, the governors identify priority issues and deal collectively with issues of public policy and governance at both the national and state levels.

⁹ These Apr. 30, 1996, hearings were on appropriations for the Veterans Administration, the Department of Housing and Urban Development, and independent agencies for fiscal year 1997.

¹⁰ The National Emergency Management Association is the professional association of state and Pacific Caribbean insular state emergency management directors.

¹¹ *Capability Assessment for Readiness* (FEMA, Dec. 10, 1997).

are also used to support the agency's terrorism-preparedness efforts. (Appendix I contains a discussion of attributes of these programs' exercises.) However, the report also identified two areas that required significant improvement: (1) planning and equipment for response to nuclear, biological, and chemical terrorist incidents and (2) coordination between state emergency management agencies and the private sector. FEMA expects to publish its fiscal year 2000 assessment report by April 2001.

FEMA Has Increased the Number and Scope of Its Terrorism Preparedness Training Courses

Since the Oklahoma City bombing, FEMA has made considerable progress in training its staff and those of other federal agencies, the states, and local entities to ensure their preparedness for a terrorist attack. The agency has developed several terrorism preparedness courses and incorporated terrorism preparedness into its emergency management curriculum. FEMA's terrorism preparedness training funding, including grants to states and local communities, totaled \$6 million in fiscal year 1998, \$7.6 million in fiscal year 1999, and \$10.4 million in fiscal year 2000.

FEMA's National Emergency Training Center, in Emmitsburg, Maryland, is a major provider of formal training related to consequence management. The Center offers resident training for its and other federal agencies' personnel and provides course materials to state and local organizations. The Center includes the Emergency Management Institute and the United States Fire Administration's National Fire Academy. The Institute serves as the national focal point for the development and delivery of emergency management training to enhance the capabilities of federal, state, and local government officials, volunteer organizations, and the private sector. Since the Institute focuses on disaster preparedness, its courses are provided to emergency managers and community-level policy officials. (Appendix II contains additional information on the Institute's principal terrorism preparedness courses.) The National Fire Academy serves as the national focal point for fire-related and emergency management training activities. First responders from fire departments across the United States attend the Academy's courses.

FEMA uses its Integrated Emergency Management course to immerse senior public officials and emergency management personnel (see app. II, table 3) in an intense, simulated disaster environment. According to FEMA's report on the Oklahoma City bombing, this course proved valuable to numerous Oklahoma City officials who had received the training in 1994. Furthermore, city officials praised the course trainers' willingness to serve

as on-site mentors to city decisionmakers during response and recovery operations after the bombing.

After the Oklahoma City bombing incident, FEMA developed its first course specifically related to terrorism preparedness in 1996 (see table 1). This course, the Integrated Emergency Management Course: Consequences of Terrorism, incorporates all the core elements of the original Integrated Emergency Management Course, but focuses on managing terrorist incidents.

Table 1: Courses and Students in the Integrated Emergency Management Course: Consequences of Terrorism

	Fiscal year				
	1996	1997	1998	1999	2000
Courses	2	3	4	3	9
Students	185	222	309	200	581

Source: FEMA.

Although the course was offered nine times in 2000, it is normally presented two to four times a year unless an agency other than FEMA (such as the Department of Justice) funds additional courses.

FEMA Coordinates Extensively to Ensure Preparedness for Consequence Management

FEMA performs many functions with other federal agencies and state and local officials to help prepare for managing the consequences of terrorist incidents. Chief among these functions are (1) coordination of key terrorism preparedness guidance and policy documents, (2) day-to-day coordination of operations and special events, and (3) membership in formal interagency groups and committees.

Coordination of Key Agency Guidance and Policy Documents

FEMA and the agencies cited most prominently in PDD 39 (the Departments of Defense, Energy, and Health and Human Services and the Environmental Protection Agency) coordinate with the FBI on its Domestic Guidelines¹² and on its Concept of Operations Plan. The FBI's guidelines are a road map for government agencies' mobilization, deployment, and use—under PDD 39—in response to a terrorist threat or incident. The FBI's Concept of Operations Plan will guide how the federal government is structured to respond to domestic terrorism incidents. The agencies listed above are now doing a final review of the Plan before the FBI issues it as formal guidance.¹³

FEMA also developed *the State and Local Guide 101 for All-Hazard Emergency Operations Planning* (1996) for state and local emergency management agencies to use in developing and updating risk-based, all-hazard emergency operations plans. These plans are the basis for an effective response to any emergency and facilitate coordination with the federal government during catastrophic disasters that require implementation of the Federal Response Plan. The guide describes core functions such as communications, evacuation, mass care, health and medical services, and resource management, as well as unique planning considerations for earthquakes, hurricanes, flooding, and hazardous materials.

A new component of State and Local Guide 101, Attachment G: Terrorism, is now being coordinated through the National Security Council's Domestic Contingency Planning and Exercises Subgroup and the National Emergency Management Association, and with the International Association of Emergency Managers.¹⁴ It is intended to aid state and local planners in developing and maintaining an appendix to their emergency operations plans on incidents involving terrorists' use of weapons of mass destruction. The attachment addresses various hazards, a concept of

¹² The Guidelines' complete title is "Guidelines for the Mobilization, Deployment, and Employment of U. S. Government Agencies in Response to a Domestic Terrorist Threat or Incidence in Accordance With Presidential Decision Directive 39."

¹³ The Concept of Operations Plan is formally known as the "United States Government Interagency Domestic Terrorism Concept of Operations Plan."

¹⁴ The International Association of Emergency Managers is a nonprofit educational organization dedicated to promoting the goals of saving lives and protecting property during emergencies and disasters. Membership is open to anyone practicing or interested in the field of emergency management and its related disciplines.

operations, organizational responsibilities, logistics, and administrative issues. FEMA expects to publish the attachment on March 30, 2001.

Day-to-Day Coordination of Operations and Special Events

Under the auspices of the National Security Council, FEMA and other agencies coordinate to provide the appropriate preparedness response at important events that may present an attractive target for terrorist attack. Through its active role in this process, FEMA has the opportunity to coordinate and practice with federal, state, and local agencies involved in consequence management. During the past 2 years, FEMA has participated in 17 special events, ranging from high-profile athletic competitions to international conferences (see table 2 for examples).

Table 2: Typical Special Events in Which FEMA Participated

Event	Location	Date
Visit of the Pope	St. Louis	Jan. 1999
World Trade Organization meeting	Seattle	Nov. 1999
IMF/World Bank meetings	District of Columbia	Apr. 2000
OpSail 2000	New York and Boston	July 2000
Olympic track and field trials	Sacramento	July 2000

Source: FEMA.

Participation in Interagency and Intra-Agency Groups and Committees

FEMA is a member of numerous interagency groups related to preparedness for domestic terrorism. It participates in the National Security Council's Weapons of Mass Destruction Preparedness Group and two of its subgroups—the Assistance to State and Local Authorities Group and the Contingency Planning and Exercises Group. FEMA maintains a formal liaison with the National Domestic Preparedness Office and supports the Domestic Preparedness Leadership Group and the State and Local Advisory Group. FEMA supports and coordinates with the Department of Justice on its programs for terrorism preparedness training activities, the state and local capabilities assessment project, and the equipment grant program. It also coordinates with and provides support to the Departments of Defense and Justice program managers on the Nunn-Lugar-Domenici Domestic Preparedness Program and participates in the

Multi-Agency Task Force on Nunn-Lugar-Domenici Exercises,¹⁵ which develops policy for domestic preparedness exercises. FEMA also serves on the Secretary of Defense's Weapons of Mass Destruction Advisory Panel, the FBI/Department of State's Interagency Working Group on Domestic/International Counter Terrorism Exercises, and the national and regional response teams concerned with hazardous material and oil spills.

FEMA exercises an active leadership role in terrorism consequence management planning. At the national level, it coordinates federal response planning through the Emergency Support Function Leaders Group, the Catastrophic Disaster Response Group (comprising the 27 signatories of the Federal Response Plan), and the Concept Plan Working Group. FEMA issues the National Exercise Schedule after compiling and coordinating information from federal departments and agencies with emergency management responsibilities. In coordination with applicable federal departments and agencies, FEMA also assessed the capabilities of federal agencies to provide consequence management in an incident involving weapons of mass destruction. FEMA and the other agencies identified key critical areas that needed to be addressed, including the need for baseline information on capabilities; combined federal, state, and local planning; and timely federal augmentation of local authorities. The overall results of this assessment were reported in 1997.¹⁶

At the regional level, FEMA regional offices coordinate consequence management planning through Regional Interagency Steering Committees. These Committees are comprised of regional representatives from essential response agencies and are responsible for coordinating regional response plans with the Federal Response Plan. Memorandums of understanding between each state and its FEMA regional office are supplemented by the regional response plans.

¹⁵ Title XIV of the National Defense Authorization Act for Fiscal Year 1997 (P.L. 104-201, Sept. 23, 1996), commonly known as the Nunn-Lugar-Domenici Act, directs the Secretary of Defense to assist federal, state, and local government agencies with training, advice, equipment, and other actions to shore up local capabilities to respond to and manage consequences of a terrorist incident involving weapons of mass destruction.

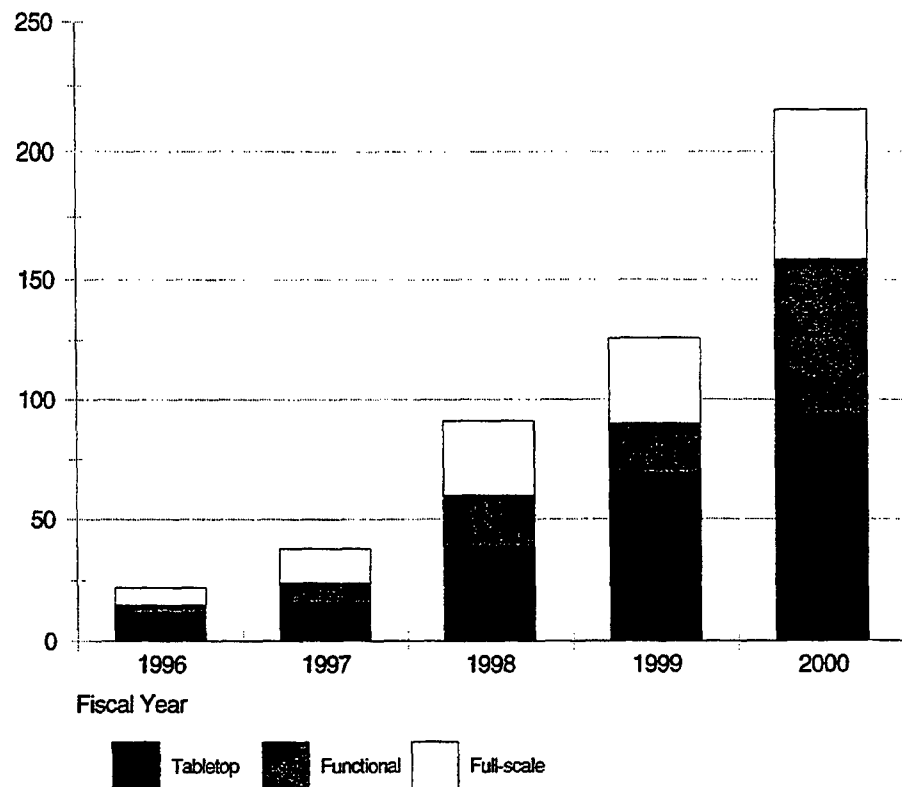
¹⁶ *Report to Congress on Response to Threats of Terrorist Use of Weapons of Mass Destruction* (Jan. 31, 1997) and *Report to the President: An Assessment of Federal Consequence Management Capabilities for Response to Nuclear, Biological, or Chemical Terrorism* (Feb. 1997).

FEMA Has Increased Support for Exercises That Test States' Response Preparedness Plans

PDD 39 requires FEMA to ensure that states' terrorism response preparedness plans are adequate and tested, and the agency has made progress in meeting this requirement. Through FEMA's and other agencies' efforts, the types, numbers, and complexity of terrorism preparedness exercises to test states' response plans have increased significantly over the past 5 years (see fig. 3). FEMA provides grants to the states and six U.S. jurisdictions¹⁷ to help them develop and test their plans. For example, FEMA sponsored 22 of the 28 exercises conducted in the state of Washington during 1996-2000. These exercises employed chemical, biological, radiological, nuclear, conventional high explosive, and combination threat scenarios while highlighting crises and consequence management activities.

¹⁷ The six U.S. jurisdictions are American Samoa, District of Columbia, Guam, Northern Mariana Islands, Puerto Rico, and the Virgin Islands.

Figure 3: Terrorism Preparedness Exercises in the States, by Exercise Type (1996-2000)



Note: Includes American Samoa, District of Columbia, Guam, Northern Mariana Islands, Puerto Rico, and the Virgin Islands.

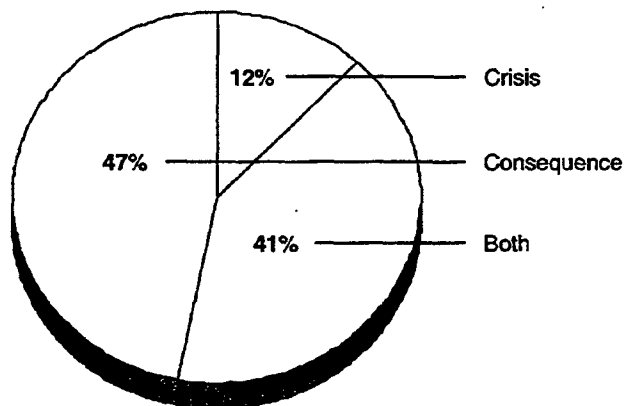
Source: FEMA and various states.

In tabletop exercises, participants discuss how their agency or unit might react to a scenario or series of scenarios. These exercises emphasize higher level policy and procedural issues and frequently include more senior-level agency officials. There is no actual deployment of personnel or equipment for tabletop exercises; rather, they are held in a classroom-type setting. Functional exercises are not conducted solely in a classroom environment and generally test an operational function, such as an evaluation of interagency emergency operations capability and response. Full-scale exercises, which are primarily conducted in the field, evaluate operations over an extended period. For field exercises, personnel and their equipment are actually deployed to a field setting where they practice

tactics, techniques, and procedures that would be used in a real incident; thus, they are the most realistic of the exercises.

During 1996-2000, FEMA led or co-led 19 percent of the terrorism preparedness exercises in which it participated. Most of the exercises (70 percent) were of the tabletop type; 30 percent were either functional or full-scale. Figure 4 reflects the focus of the exercises.

Figure 4: FEMA Terrorism Preparedness Exercise Participation, by Focus (1996-2000)



Source: FEMA (as of Sept. 2000).

In May 2000, in responding to a congressional mandate that a national combating terrorism field exercise be conducted, FEMA joined with the Department of Justice to sponsor TOPOFF (top officials) 2000.¹⁸ TOPOFF 2000 was a large-scale, "no-notice exercise"¹⁹ of federal, state, and local organizations', including the American Red Cross, plans, policies, procedures, systems, and facilities to assess the nation's crisis and consequence management capability. In Denver, Colorado, the exercise involved a biological weapons incident, and in Portsmouth, New

¹⁸ This requirement is in House Report 105-825 (Oct. 19, 1998), Making Omnibus Consolidated and Emergency Supplemental Appropriations for Fiscal Year 1999.

¹⁹ No-notice exercises are conducted without advance notice to the participants, thus providing the highest degree of challenge and realism.

Hampshire, the exercise involved a chemical incident. In addition, NCR 2000 (National Capital Region), a separate but concurrent exercise, was a no-notice exercise of an incident that involved simulated mass casualties and highlighted the use of radiological devices. (Fig. 5 shows a decontamination team during the exercise.) NCR 2000 consisted of previously planned exercises that complemented the TOPOFF 2000 activities but did not involve agencies' top officials. An assessment of the benefits of these exercises was under way but not available at the time of our review.²⁰

Figure 5: Hazardous Material Decontamination Team in Aurora, Colorado, During TOPOFF 2000



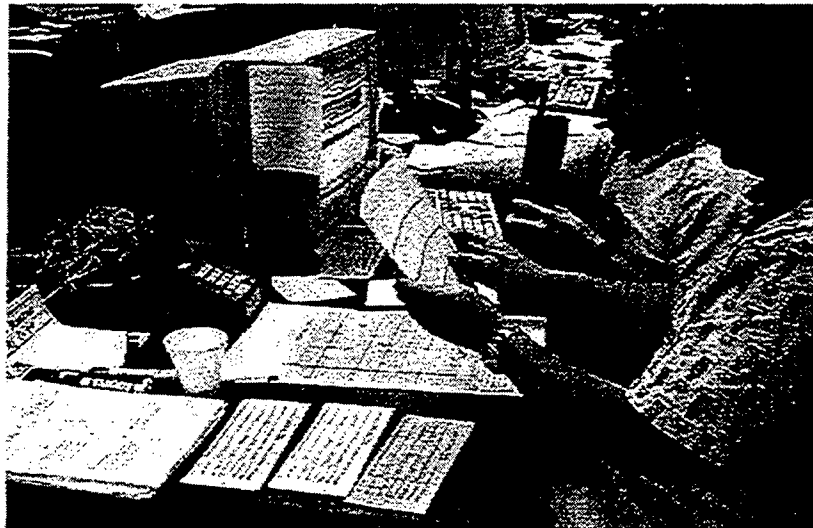
Source: GAO.

During the last 5 years, FEMA has also conducted a series of functional exercises for community-based public officials and emergency personnel as part of its Integrated Emergency Management Course: Consequences of Terrorism. Through the simulation of a realistic crisis scenario, participants are exposed to an increasingly complex and stressful situation within a

²⁰ FEMA does not intend to produce an after-action report for the TOPOFF 2000/NCR 2000 exercises but will provide input for the Department of Justice's after-action report.

structured learning environment. The course culminates in an emergency exercise designed to test leadership, knowledge, awareness, and interpersonal skills. Figure 6 shows dispatchers participating in an exercise during the course at the Mount Weather Emergency Assistance Center. (See app. II for additional information on the course.)

Figure 6: Operations Group Dispatchers During the Consequences of Terrorism Course Exercise



Source: FEMA.

Agency Comments and Our Evaluation

We provided a draft of this report to FEMA for its review and comment. FEMA agreed with the report's characterization of its terrorism-related activities and provided technical comments for our consideration. We incorporated technical comments as appropriate. A copy of FEMA's letter is included in appendix III.

Scope and Methodology

To determine the extent FEMA has incorporated lessons learned from its response to the Oklahoma City bombing incident, we reviewed FEMA's after-action report and the after-action report prepared by the Oklahoma Department of Civil Emergency Management. To determine the actions taken to address the lessons learned, we interviewed senior FEMA officials and officials in the Preparedness and Response and Recovery Directorates,

using a survey instrument keyed to the 3 broad and 22 specific recommendations contained in the FEMA report.²¹ FEMA's Region VI Director, who coordinated federal operations after the bombing, provided a written response to our questions. We also identified and reviewed several actions that FEMA and its partner federal agencies implemented to improve its response to terrorist incidents, for example, the revisions to the Federal Response Plan, the addition of a Terrorism Incident Annex, and improvements to the terrorism training program. We also surveyed FEMA's regions and the states to determine whether the states' and localities' emergency operations plans are current, mirror the Federal Response Plan, and incorporate a section on terrorism.

To determine the extent to which FEMA has ensured the preparedness of states and federal agencies to respond to terrorist incidents, we reviewed our prior work on combating terrorism, FEMA's strategic plan, annual performance plans and reports, and the Terrorism Preparedness Strategic Plan. We also reviewed PDDs 39 and 62 and discussed their requirements with top FEMA officials relative to the Federal Response Plan and its Terrorism Incident Annex, FEMA's budget for consequence management, the State and Local Guide for All-Hazard Emergency Operations Planning and its draft section on unique planning considerations for terrorism incidents, special events' operational plans, and the Capability Assessment for Readiness report. We also reviewed FEMA's terrorism grants program, including several state grant proposals and reports. To determine progress in the terrorism preparedness training since the Oklahoma City bombing, we visited and interviewed senior agency officials at the National Emergency Training Center, including the Emergency Management Institute and the National Fire Academy, in Emmitsburg, Maryland. To assess the dispersion and density of FEMA's training program coverage, we used a geographic information systems program to map students' city or zip codes for three selected courses.

To assess FEMA's progress in ensuring that states' response plans are adequate and tested, we reviewed our prior work on terrorism preparedness exercises. We analyzed the numbers, types, and threat scenarios of terrorism exercises conducted in the states since 1995. We also discussed the nature, scope, and extent of the terrorism exercise program with several state program managers for the emergency

²¹ *Report of the FEMA EM 3115, DR-1048 Review of the Bombing of the Alfred P. Murrah Building, Apr. 19, 1995, Oklahoma City, Oklahoma, June 12-13, 1995 (Sept. 1995).*

management of terrorist incidents and exercise directors. We interviewed and obtained exercise program data from officials at FEMA headquarters. During our visit to the National Emergency Training Center, we observed a terrorism consequence management exercise conducted as a part of FEMA's Integrated Emergency Management Course: Consequences of Terrorism. We also discussed the course and exercise with some of its participants. We also examined policies, program plans, guidelines, and handbooks; exercise plans and reports; and training course materials. We attended NCR 2000 controller/observer training and observed TOPOFF 2000 and NCR 2000 exercise operations in the FEMA emergency operations center and the Catastrophic Disaster Response Group.

We performed our work from March through December 2000 in accordance with generally accepted government auditing standards.

Unless you publicly announce the contents of this report earlier, we plan no further distribution of this report until 30 days after its issue date. At that time, we will send copies to appropriate congressional committees and the federal agencies discussed in this report. We will also make copies available to other interested parties upon request.

If you have any questions about this report, please contact me at (202) 512-6020. GAO contacts and staff acknowledgments to this report are listed in appendix IV.



Raymond J. Decker
Director, Defense Capabilities
and Management

Federal Emergency Management Agency Programs With Well-Established Consequence Management Exercise Practices

The Chemical Stockpile Emergency Preparedness Program (CSEPP) and the Radiological Emergency Preparedness (REP) Program are Federal Emergency Management Agency (FEMA) programs that conduct consequence management exercises. CSEPP and REP exercises (1) have clearly defined objectives, (2) are resourced with both headquarters and field staff involvement, (3) have consistent schedules and assessment programs, and (4) build on lessons learned through after-action reporting. CSEPP and REP cover 10 and 32 states, respectively, and together conduct about 40 exercises per year.

CSEPP

In 1985, Congress directed¹ the Department of Defense to dispose of its pre-mixed (i.e., lethal unitary) chemical agents and munitions while providing *"maximum protection for the environment, the general public and the personnel involved in the destruction of lethal chemical agents and munitions"* Ten states (8 with storage facilities) and 40 counties are involved.

In response to congressional direction, the Army sought funds to support a site-specific emergency planning program for communities located near the bases within those 10 states that could be affected by the release of chemicals during storage or destruction. Because the Army had little experience dealing with state and local emergency management authorities and possessed no infrastructure to manage the program, it looked for support from other federal agencies, specifically FEMA, to help meet the mandate. Therefore, FEMA joined the Army in implementing CSEPP through a Memorandum of Understanding signed in August 1988.

CSEPP's goal is to improve preparedness to protect the people of these communities in the event of an accident involving U.S. stockpiles of obsolete chemical munitions. The Memorandum of Understanding identified the specific responsibilities of the Army and FEMA, defining areas of expertise and outlining where cooperation would result in a more efficient use of personnel and resources. FEMA is responsible for developing preparedness plans, upgrading response capabilities, and conducting training for communities located near the Army bases.

¹ P.L. 99-145, title 14, part B, section 1412, codified at 50 U.S.C. 1521.

Appendix I
Federal Emergency Management Agency
Programs With Well-Established
Consequence Management Exercise
Practices

Local and state emergency services, along with public health, environmental, fire and rescue, law enforcement, and medical service agencies, have major roles, as do elected and appointed officials. The Army and FEMA provide funding, training, guidance, technical support, and expertise. Other federal agencies, including the Environmental Protection Agency and the Department of Health and Human Services, also lend their expertise in specific areas.

CSEPP provides planning, training, equipment, emergency operations centers, command and control systems, personnel, cooperative agreement funds, exercises, and more. FEMA administers the local community portion of the program primarily through its regional offices. Each region has a CSEPP program manager. FEMA serves as CSEPP exercise co-director in each region and takes the lead in planning, conducting, evaluating, reporting, and tracking identified findings. CSEPP funds pay for over 200 staff at the state and county levels, including planners, trainers, health and automation experts, and logistical personnel. Comprehensive planning guidance is contained in FEMA's *Planning Guidance for the Chemical Stockpile Emergency Preparedness Program*.

CSEPP was established to test local, installation, and state emergency operations plans and the jurisdictions' capabilities to implement those plans. The program is governed by the *Exercise Policy and Guidance for the Chemical Stockpile Emergency Preparedness Program*. Exercises are generally conducted on an annual basis at each location. Through 1999, 62 CSEPP exercises had been conducted. For many of the state and local jurisdictions, CSEPP's comprehensive, multijurisdictional exercise program was a new concept. Before CSEPP, communities exercised their emergency preparedness capabilities; however, exercises were generally focused on first responder fire or hazardous materials communities. Thus, multijurisdictional exercises were the exception, rather than the norm.

CSEPP included two types of exercises, the Federally Managed Exercise and the Alternate Year Exercise. Localities may conduct additional exercises. The Federally Managed Exercise is a mandatory, federally evaluated readiness assessment of a community's full capabilities to respond to a chemical stockpile accident. This exercise tests the entire emergency response effort and evaluates interaction of all components. It involves mobilization of emergency service and response agencies, activation of communications centers and emergency facilities, such as emergency operations centers and command posts, and field play. An Alternate Year Exercise is used by a community to train participants,

Appendix I
Federal Emergency Management Agency
Programs With Well-Established
Consequence Management Exercise
Practices

evaluate emergency operations plans, evaluate procedures for new equipment or resources, validate corrections to outstanding findings, and address other issues. A community may request varying levels of federal support or management.

Many lessons have been learned from the exercises. For instance, FEMA has learned that communication between installations and nearby communities has improved considerably over the years and that assessing threat and meeting notification times for nearby communities has been difficult. The information gained from post-exercise reports allows planners to focus exercises on areas requiring greater attention. Every exercise evaluation ends with a meeting in which exercise evaluators provide immediate feedback to the community. Further, a 45-day review and comment period is provided prior to finalization and distribution of the exercise report, which consists of a plan negotiated by regional, state, and local officials to correct deficiencies and identify responsibility for corrective actions. Problems noted during exercises are addressed in future planning and training activities.

REP

FEMA is the lead federal agency for planning and preparedness for all types of peacetime radiological emergencies,² including accidents at commercial nuclear power plants. Dating back to the incident at Three Mile Island in 1979, FEMA has worked with state and local governments to ensure that emergency preparedness plans are in place for U.S. commercial nuclear power plants.³ FEMA issues policy and guidance to assist state and local governments in developing and implementing their radiological emergency response plans and procedures. Much of this FEMA guidance is developed with the assistance of the Federal Radiological Preparedness Coordinating Committee and its member agencies.

REP has a goal of ensuring that the public health and safety of residents living around commercial nuclear power plants are adequately protected in the event of an accident. The program's responsibilities encompass only "off-site" activities—that is state and local government emergency

²The Federal Radiological Emergency Response Plan outlines the federal response to any peacetime radiological emergency.

³ There are 104 commercial nuclear reactors at 65 sites licensed by the Nuclear Regulatory Commission to operate in the United States.

preparedness activities that take place beyond the nuclear power plant's boundaries. On-site activities continue to be the responsibility of the Nuclear Regulatory Commission.

REP is responsible for

- reviewing and evaluating off-site radiological emergency response plans developed by state and local governments;
- evaluating exercises conducted by state and local governments to determine whether plans are adequate and can be implemented;
- preparing findings and making determinations on the adequacy of off-site emergency planning and preparedness and submitting them to the Nuclear Regulatory Commission;
- responding to requests by the Nuclear Regulatory Commission under the Memorandum of Understanding between the Commission and FEMA dated June 17, 1993;
- coordinating the activities of more than a dozen federal agencies with responsibilities in the radiological emergency planning process; and
- chairing the Federal Radiological Preparedness Coordinating Committee and the Regional Assistance Committee.

REP evaluates the adequacy of state and local emergency preparedness plans during regular exercises. REP exercises are designed to test the capability of off-site response organizations to protect the public health and safety through the implementation of their emergency response plans and procedures under simulated accident conditions. FEMA's Radiological Emergency Preparedness Exercise Manual and the Radiological Emergency Preparedness Exercise Evaluation Methodology serve as the principal documents that FEMA uses in all aspects of REP exercises. According to FEMA officials, these documents have been valuable tools for assessing the adequacy and implementation of state and local governments' radiological emergency preparedness plans and procedures.

The exercise manual provides guidance for planning and conducting REP exercises. It provides basic guidance for the interpretation and application of planning standards and evaluation criteria. These standards and criteria are included in 33 REP objectives that are to be demonstrated by the off-site response organizations at the biennial REP exercises. The exercise objectives address the off-site response organization's capability to carry out specific radiological emergency functions such as communications, mobilization of emergency response personnel, accident assessment,

**Appendix I
Federal Emergency Management Agency
Programs With Well-Established
Consequence Management Exercise
Practices**

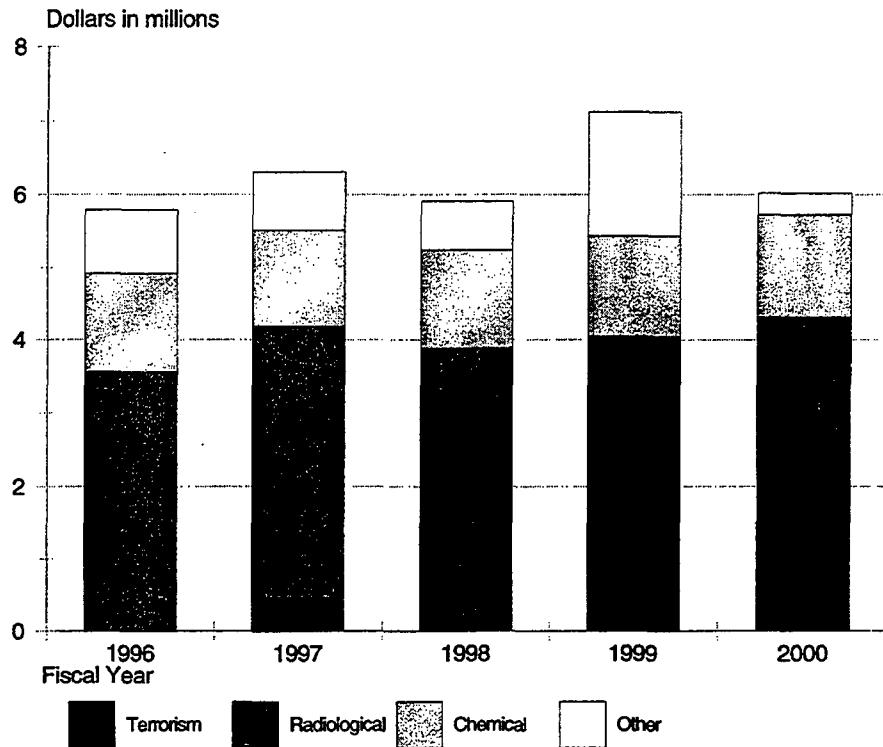
protective action decision-making and implementation, public alerting and notification, and evacuee monitoring and decontamination.

Similarly, the exercise evaluation methodology assists FEMA and other federal agencies in the uniform and consistent documentation of the performance of the off-site response organizations during REP exercises. The REP methodology document contains a set of 33 multipage evaluation forms, 1 for each of the 33 REP objectives delineated in the exercise manual. Each evaluation form consists of a series of short questions or prompts (points of review) for each REP objective to facilitate the exercise evaluator's systematic collection and documentation of essential data and information required by FEMA. This information provides the basis for FEMA findings and determinations on the adequacy of plans and preparedness that are submitted to the Nuclear Regulatory Commission for consideration in licensing decisions.

Figures 7 and 8 show the level of program funding for the FEMA exercise program and provide indicators for the level of effort required for an exercise program.

Appendix I
Federal Emergency Management Agency
Programs With Well-Established
Consequence Management Exercise
Practices

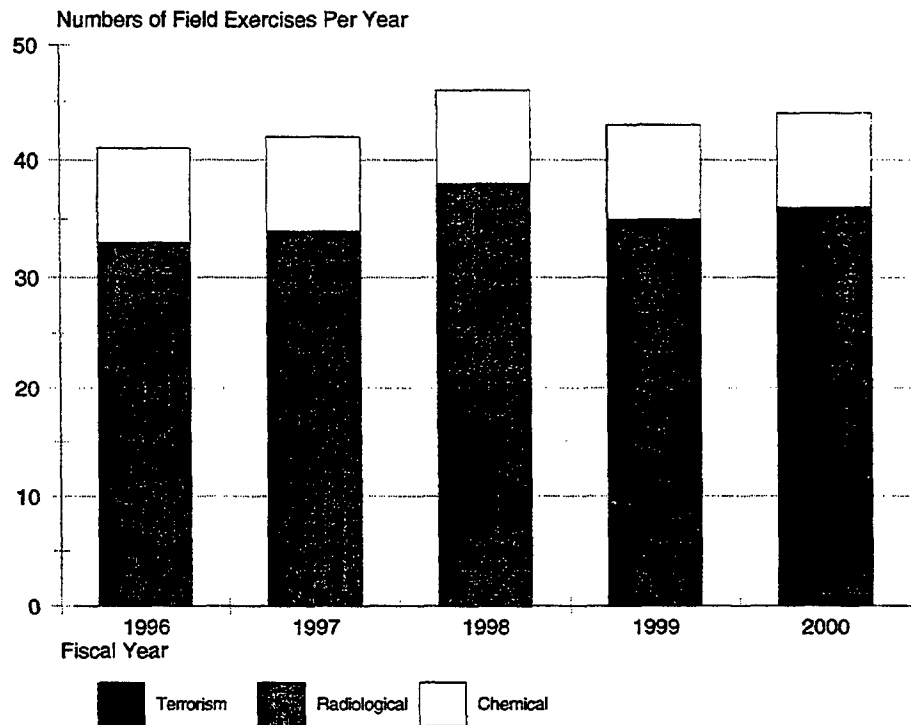
Figure 7: FEMA Exercise Program Funding, by Major Category



Source: Analysis of FEMA data.

Appendix I
Federal Emergency Management Agency
Programs With Well-Established
Consequence Management Exercise
Practices

Figure 8: FEMA Exercise Program, by Major Category



Source: Analysis of FEMA data.

FEMA's Terrorism Preparedness Training Program

FEMA has developed and expanded a terrorism preparedness curriculum involving several of its organizations. FEMA's Emergency Management Institute, which delivers numerous all-hazards emergency response and related courses, also delivers several courses that focus on the implications of terrorism incidents for emergency management. Similarly, FEMA's National Fire Academy, part of the United States Fire Administration, has developed a series of courses addressing emergency response for terrorism incidents. These courses are primarily for delivery to first fire and rescue responders and to incident commanders.

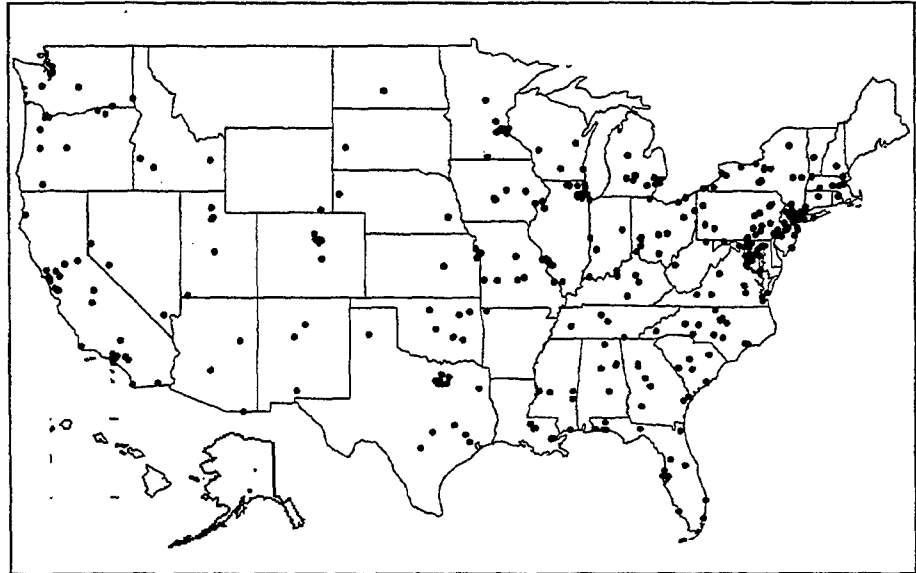
Emergency Management Institute

As part of its all-hazards emergency response and recovery curriculum, the Emergency Management Institute has developed and delivered numerous emergency response, incident command, and related courses. These courses are offered to federal, state, and local organizations and personnel. The Institute also offers a number of courses that incorporate terrorism preparedness elements. Some of these courses are focused on the Community Emergency Response Team, Radiological Emergency Response Operations, Incident Command System, exercise design, and Mass Fatalities Incident Response. FEMA has also developed a course, Terrorism and Emergency Management, as part of its Higher Education Project. Through the National Fire Academy, FEMA provides several courses in the Emergency Response to Terrorism curriculum.

The Institute delivered its first terrorism preparedness course, the Integrated Emergency Management Course: Consequences of Terrorism, in 1996. Since then, the Institute has incorporated terrorism preparedness in its courses as part of the all-hazards approach. Following are other terrorism preparedness courses developed and offered by the Institute:

- **Emergency Response to Criminal and Terrorist Incidents.** A 1-day course that focuses on the interface between law enforcement authorities and emergency management system personnel. It addresses topics such as lifesaving and evidence preservation. This course can be taught by local officials using Institute materials.
- **Senior Officials Workshop on Terrorism.** A 1-day course that addresses special planning and policy considerations related to terrorism preparedness. The workshop is conducted on location, with a 3-hour instructional module followed by a 3-hour exercise. The target audience is the mayor and other senior management officials. (Fig. 9 highlights the locations where officials have received this training.)

Figure 9: Locations of Workshops on Terrorism for Senior Officials (1996-June 2000)

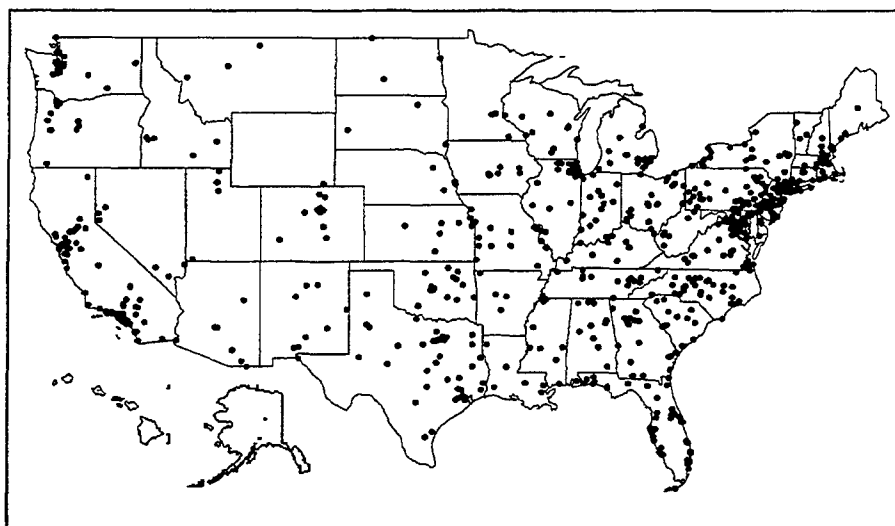


Source: Our analysis of FEMA data.

Weapons of Mass Destruction Course. A series of facilitator-led courses intended to improve the ability of senior local government officials to manage and respond to mass casualty terrorism incidents involving the use of weapons of mass destruction. Each course in the series incorporates the same five objectives, with a different weapons of mass destruction scenario introduced during each course. The scenarios include incidents involving nuclear, radiological, chemical, and biological agents or devices. (Fig. 10 shows where this course was given during 1996-June 2000.)

Appendix II
FEMA's Terrorism Preparedness Training
Program

Figure 10: Locations of Courses on Weapons of Mass Destruction (1996-June 2000)



Source: Our analysis of FEMA data.

**Integrated Emergency
Management Course:
Consequences of Terrorism**

This exercise-based course focuses on preparing local community officials who must respond to the consequences of a terrorist act. The Integrated Emergency Management Course: Consequences of Terrorism is presented at the Institute and on location. Two versions are offered based on the audience. A general iteration is presented to local officials from different venues, while a more tailored program is presented to officials from the same city or community. Table 3 provides a nominal list of the participants for the tailored course.

Appendix II
FEMA's Terrorism Preparedness Training
Program

Table 3: Nominal Participants in the Integrated Emergency Management Course: Consequences of Terrorism, by Discipline and Position

Government	Public works/utilities
Mayor	Public works director
City/county manager	Assistant public works director
City council	Street superintendent
County board	Water superintendent
City/county attorney	Sewer superintendent
City clerk/records clerk	Engineering representative
Finance director	Solid waste representative
Procurement director	Electric company representative
Planning director	Gas company representative
Personnel director	Telephone company representative
Risk manager	Building and safety representative— Emergency Operations Center
	Public works dispatcher
Law enforcement	
Police chief	Community services
Assistant police chief	Red Cross representative—Emergency Operations Center
Police investigations	Red Cross representative—operations
Police operations officer	Salvation Army representative
Police dispatcher	School superintendent
Sheriff	Assistant school superintendent
Chief deputy sheriff	
Sheriff's operations officer	Emergency Management
Sheriff's dispatcher	Emergency program manager
State police operations officer	Assistant emergency program manager
State police representative in Emergency Operations Center	National Guard representative
	Information technology specialist
Fire	Local transit representative
Fire chief	
Assistant fire chief	Emergency medical/health
Fire marshal	Emergency medical coordinator
Fire HAZMAT representative	Emergency medical operations officer
Fire operations officer	Emergency medical dispatcher
Fire dispatcher	Public director

Appendix II
FEMA's Terrorism Preparedness Training
Program

(Continued From Previous Page)

	Public health officer
Public information officers (PIO)	Assistant public health officer
PIO in Policy Group	Environmental health representative
PIO in Emergency Operations Center	Mental health representative
PIO in Operations Group	Hospital coordinator
	Medical examiner
	Toxicologist

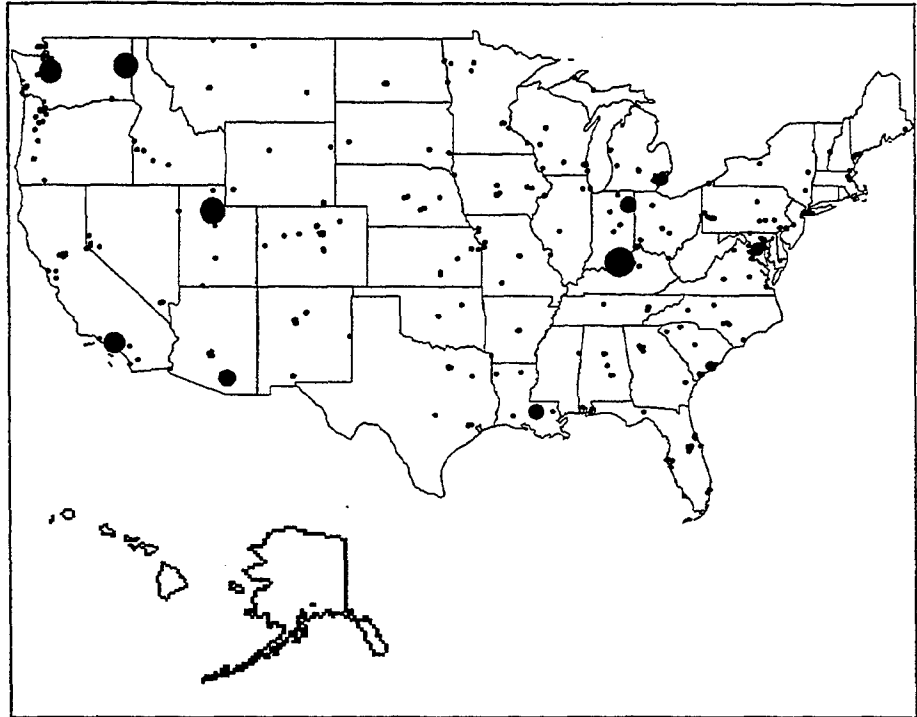
Source: FEMA.

Prior to presenting the tailored version on site, the Institute sends an advance team to the receiving location to review its Emergency Operations Plan and design the exercise phase based on the actual environment.

Classroom instruction, planning sessions, and exercises are intended to allow for structured decision-making in a realistic environment. Special emphasis is placed on the fact that the disaster area is also a crime scene. In addition to the actual exercise of plans and procedures, participants' skills and abilities are tested.

As shown in figure 11, the course has reached a wide audience throughout the nation.

Figure 11: Locations of and Participants in the Integrated Emergency Management Course (1996-June 2000)



Source: Our analysis of FEMA data.

To facilitate its training program, FEMA has increased the use of independent study courses and the Internet. FEMA has also implemented a satellite-based distance learning system, the *Emergency Education NETWORK*, that can provide interactive training programs to communities nationwide.

United States Fire Administration's National Fire Academy

The United States Fire Administration is responsible for numerous emergency management activities, including disaster planning, community preparedness, hazard mitigation, and training. In addition to its more traditional role, the Fire Administration is also an active participant in the preparation for and fight against terrorism. The Fire Administration participates as an active member of the FEMA federal response team and its staff members support many of the Federal Response Plan activities.

The National Fire Academy, part of the Fire Administration, works to enhance the ability of fire and emergency services and allied professionals to deal more effectively with fire and related emergencies. Along with its federal partners and response shareholders, the Academy has developed a series of courses for delivery to first fire and rescue responders.

The Academy has a number of course delivery systems. On the Emmitsburg, Maryland, campus, the Academy conducts specialized training courses and national-level advanced management programs. The Academy also delivers courses throughout the nation in cooperation with state and local fire training organizations and local colleges and universities. Students can attend courses within their geographical regions through the Academy's off-campus, Regional Delivery Program. Through a cooperative working relationship with state and local fire training systems, the Academy's Train-the-Trainer Program provides expanded opportunities for fire service personnel to participate in Academy courses. Personnel of the four branches of the armed services also participate in this program at the state and local level.

The Academy began developing its initial Emergency Response to Terrorism courses for firefighters in fiscal year 1996 and delivered its initial course in fiscal year 1997. The numbers of courses have steadily increased. Currently, seven different Emergency Response to Terrorism courses are offered (see table 4). According to FEMA officials, other courses are under development.

Appendix II
FEMA's Terrorism Preparedness Training
Program

Table 4: FEMA's Emergency Response to Terrorism Courses and Curriculum Aid

Offered	Description
Emergency Response to Terrorism: Self-Study	This is a self-paced, paper-based course providing basic awareness training to help prepare first responders for terrorism incidents. It is also available online.
Emergency Response to Terrorism: Basic Concepts	This 2-day course is designed to prepare the first responder to take the appropriate actions at a potential terrorist incident. Subjects covered include understanding terrorism, types of terrorist weapons, defensive considerations, and command and control. Course focus includes recognition of terrorist incidents, implementation of self-protection measures, and scene security.
Emergency Response to Terrorism: Tactical Considerations-Company Officer	This 2-day course is designed to build upon the existing skills of the initial first responding supervisor from the self-study and basic concepts courses. The student is trained in security considerations, identifying signs of terrorism, assessing information, and anticipating unusual response circumstances.
Emergency Response to Terrorism: Tactical Considerations-Emergency Medical Services	This 2-day course is designed for the first-on-the-scene emergency medical services personnel with the responsibility of rendering patient care to victims of terrorist incidents. In addition to building upon the skills of the self-study and basic concepts courses, the students also apply their knowledge about responding to a terrorist event.
Emergency Response to Terrorism: Tactical Considerations-Hazardous Materials	This 2-day course is designed for the first-on-the-scene hazardous materials technician or other person having the responsibility of developing initial hazardous material tactical considerations. The students also apply their knowledge about responding to a terrorist event.
Emergency Response to Terrorism: Incident Management	This 6-day advanced level course is designed to focus on fire service response to terrorism from an incident management approach. The course presumes a knowledge of the Incident Command System and deals with issues such as recognizing a terrorist incident, preservation of evidence, planning an intelligence, federal response and unified command, hazardous materials, and emergency medical services. It uses simulation exercises and case studies.
Emergency Response to Terrorism: Strategic Considerations for Command Officers	This 2-day course focuses on the duties and responsibilities of the Command officer of the fire department who may respond to a terrorist incident. The curricula covers strategic planning considerations, interface with counterparts at each level, incident termination, debriefing, and transition to normalcy.
Curriculum Aid: Emergency Response to Terrorism: Job Aid	The National Fire Academy developed this handbook to support the Emergency Response to Terrorism curriculum. Incidents involving weapons of mass destruction happen infrequently. However, because of the specialized response actions that will likely be required, emergency first responders can benefit from a job aid that helps them make decisions that will not further endanger themselves or the general public.

Source: FEMA.

Comments From the Federal Emergency Management Agency



Federal Emergency Management Agency

Washington, D.C. 20472

FEB - 5 2001

Mr. Raymond J. Decker
Director
Defense Capabilities and Management
United States General Accounting Office
Washington, DC 20548


Dear Mr. Decker:

In response to your letter of January 17, 2001 to Director James Lee Witt, I am providing additional comments on the on the draft GAO Report entitled *Combating Terrorism: FEMA Continues to Make Progress in Coordinating Preparedness and Response*.

Several FEMA offices reviewed the report, including the Response and Recovery Directorate, the Preparedness, Training and Exercises Directorate, the Operations Support Directorate, the United States Fire Administration, and the Office of General Counsel. Their comments are provided in the enclosure to this letter.

We appreciate the excellent working relationship that has been established with your office and staff in developing this report and others in the *Combating Terrorism* series. I trust this information is responsive to your request. If you need further assistance, please contact me on 202-646-3617.

Sincerely,


Thomas M. Antush
Acting Senior Advisor
for Terrorism Preparedness

Enclosure

GAO Contacts and Staff Acknowledgments

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Acknowledgments

In addition to those named above, Nadine Furr, Jay Willer, and Judy Clausen made key contributions to this report.

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DOCUMENT 2

The Army and Homeland Security: A Strategic Perspective

AD-A387874



March 2001

**Army War College
Strategic Studies Institute
Carlisle Barracks, PA**

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**THE ARMY AND HOMELAND SECURITY:
A STRATEGIC PERSPECTIVE**

Antulio J. Echevarria II

March 2001

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Abstract The topic of homeland security includes a broad array of missions and mission areas ranging from national missile defense to military assistance to civil authorities. The topic has recently attracted a great deal of attention due to the public's heightened awareness of the variety and nature of emerging threats and of the United States vulnerabilities to them. The Army Staff was assigned to investigate the Army's role in homeland security from a strategic, rather than a legal or procedural perspective. The author achieves this perspective by placing homeland security missions within the larger spectrum of operations. In so doing, he exposes potential problem areas--missions requiring more or different force structure than that already available--for further action by the Army. He also recommends that the Army consider alternative force-sizing metrics that include, as a minimum, the high-end homeland security identified in the study.		
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FOREWORD

The topic of homeland security includes a broad array of missions and mission areas ranging from national missile defense to military assistance to civil authorities. Recently the topic has attracted a great deal of attention due to the public's heightened awareness of the variety and nature of emerging threats and of the United States' vulnerabilities to them.

This monograph, written by Lieutenant Colonel Antulio J. Echevarria II, grew out of a tasking by the Army Staff to investigate the Army's role in homeland security from a strategic, rather than a legal or procedural perspective. The author achieves this perspective by placing homeland security missions within the larger spectrum of operations. In so doing, he exposes potential problem areas—missions requiring more or different force structure than that already available—for further action by the Army. He also recommends that the Army consider alternative force-sizing metrics that include, as a minimum, the "high-end" homeland security identified in the study.

DOUGLAS C. LOVELACE, JR.
Director
Strategic Studies Institute

BIOGRAPHICAL SKETCH OF THE AUTHOR

ANTULIO J. ECHEVARRIA II is a lieutenant colonel in the U.S. Army currently assigned as the Director of Strategic Research at the Strategic Studies Institute at Carlisle Barracks, PA. He graduated from the U.S. Military Academy in 1981, was commissioned as an armor officer, and has held a variety of command and staff assignments in Germany and Continental United States; he has also served as an assistant professor of European history at the U.S. Military Academy; Squadron S3 of 3/16 Cavalry; Chief of BN/TF and Bde Doctrine at the U.S. Army Armor Center at Fort Knox; as an action officer at the Army After Next project at HQ TRADOC, Ft. Monroe, VA; and as a speechwriter for two U.S. Army Chiefs of Staff. He is a graduate of the U.S. Army's Command and General Staff College, and holds M.A. and Ph.D. degrees in History from Princeton University. He has published articles in a number of scholarly and professional journals to include the *Journal of Military History*, *War in History*, *War & Society*, *the Journal of Strategic Studies*, *Parameters*, *Joint Force Quarterly*, *Military Review*, and *Airpower Journal*. His book, *After Clausewitz: German Military Thinkers before the Great War*, was published by the University Press of Kansas in March 2001.

THE ARMY AND HOMELAND SECURITY: A STRATEGIC PERSPECTIVE

Throughout our nation's history, the U.S. Army and its sister Services have readily responded to the Constitutional requirement "to insure domestic Tranquility and provide for the common defence."¹ That requirement has obliged U.S. forces to conduct a broad range of missions from the suppression of sedition, as in the Whiskey Rebellion of 1794, to the reconquest of U.S. territories, as in the Second World War. However, global economic changes, the rapid advance of information technologies, and the increasing proliferation of long-range missiles and weapons of mass destruction (WMD) recently have added new dimensions to the requirement to protect the homeland.² Accordingly, political and military leaders have begun to voice concerns about America's growing vulnerability and what should be done about it.³ It is both timely and appropriate, therefore, for the U.S. Army to reexamine the issue of homeland defense and to assess whether it possesses the necessary resources to perform its homeland security (HLS) missions while carrying out its other responsibilities under the national security and national military strategies.

This monograph approaches homeland security as a strategic issue, examining the Army's capacity to accomplish its HLS missions under the *current* force-sizing metric and war planning requirement to fight two simultaneous (or nearly simultaneous) major theater wars (MTWs).⁴ Little agreement exists over whether the Services have sufficient forces to execute two MTWs even without the additional—and still difficult to quantify—requirements associated with HLS.⁵ Furthermore, despite much debate about the future of U.S. national security strategy and much rhetoric about the vulnerabilities of the homeland, little of the work done to date on alternative strategies actually addresses the requirement to protect the

homeland.⁶ To assist the Department of Defense (DoD) in identifying requirements and assigning priorities for HLS, the Army should establish a force-sizing metric for its HLS missions, particularly its high-end missions (defined later).

Assumptions.

This monograph makes two fundamental assumptions. First, the United States will remain engaged in the world for the foreseeable future. As a result, its national security strategy of "Engagement" and its national military strategy of "Shape, Respond, Prepare Now" will remain unchanged in principle, even if the terms and priorities are altered.⁷

Second, if U.S. national culture and historical traditions are any indication, Americans will demand a domestic environment in which their homeland is secure, but civil authority and liberties remain intact and security measures are transparent.⁸ Accordingly, the U.S. military will perform the bulk of its HLS missions as the supporting rather than the lead federal agency and may have to comply with fairly restrictive rules of engagement.⁹

A New Threat Environment.

With the ending of the Cold War and the emergence of a new technological revolution, the threat environment has changed. A number of regional powers, states of concern, and transnational groups already possess limited, if asymmetric, means capable of challenging the interests of the United States abroad and those of its allies.¹⁰ Intelligence estimates indicate, for instance, that ballistic missiles will continue to proliferate over the next few decades. More than 25 countries currently possess ballistic missiles, though only two, Russia and China, have intercontinental ballistic missiles (ICBMs) capable of reaching the United States. However, China's missile arsenal will probably increase significantly in the next decade. Furthermore, as the report of the Commission to Assess the Ballistic Missile Threat to the United States (the

Rumsfeld report) concluded, within 5 years North Korea and Iran (and Iraq in 10 years) will have the capability to target the United States with ICBMs armed with conventional and unconventional warheads.¹¹ Conceivably, by 2010, any one of these states and a score of others could issue a "stay at home or else" ultimatum to the U.S. National Command Authority (NCA), thereby effectively threatening the nation's ability to protect its interests overseas.¹²

In addition, cruise missiles—which vary in type from relatively inexpensive unmanned aerial vehicles (UAVs) to million-dollar-per-copy Tomahawks—have proliferated enormously in recent years. Approximately 19 nations currently produce cruise missiles of some type, while more than 75 countries possess them. Often referred to as the "poor-man's air force," cruise missiles are much cheaper to develop and easier to conceal than ballistic missiles. They can also carry payloads similar to those of ballistic missiles, but can deliver them with greater effectiveness because of their ability to make multiple passes. Intelligence estimates project a market of some 7,000 cruise missiles of the land-attack type by 2010, not counting Chinese or American purchases.¹³ These missiles can be concealed in and launched from standard shipping containers. U.S. ports typically handle 13,000,000 shipping containers annually, but only a fraction of these are inspected. On any given day, about 1,000 ships travel the Atlantic Ocean, making it difficult to determine which vessel (or vessels) might launch, or had launched, a cruise missile against a U.S. target.¹⁴ To date, the major sea and air ports of the United States lie virtually unprotected from an attack by land-or sea-launched cruise missiles.

Furthermore, assessments conducted by the United States Commission on National Security/21st Century (Hart-Rudman Commission) and the National Commission on Terrorism (Bremer Commission) point out that America remains vulnerable to a large-scale terrorist attack.¹⁵ While the total number of terrorist incidents in the United States

has declined from a high of 51 in 1982 to a low of 3 in 1996, the overall lethality of terrorism worldwide has risen from an average of 1,200 casualties during 1987-94 to more than 3,500 during 1995-97.¹⁶ Intelligence projections, such as *Global Trends 2015*, suggest that this trend will continue.¹⁷ What's more, some political leaders have expressed concern that large-scale domestic terrorism has already begun—as evidenced by the Oklahoma City bombing—and that extremist organizations like the Order and the Aryan Resistance are planning more attacks.¹⁸ Domestic terrorism thus poses at least as serious a threat to U.S. citizens as the international brand, perhaps more.

Moreover, international and domestic terrorists appear to have grown more radical in their aims and methods. During the Cold War, international terrorists typically executed limited attacks so as not to undermine external political and financial support for their causes. Today, however, a number of international and domestic terrorist organizations seem motivated by revenge or apocalyptic fears, and seem bent on inflicting as many casualties as possible. Some international terrorists, such as Osama bin Laden and his al-Qaida organization, have achieved a considerable degree of fiscal and political independence and are thus less concerned that mass-casualty attacks would alienate their supporters. Hence, terrorist attacks in general have expanded in scale, as evidenced by the 1993 bombing of the World Trade Center, which was expected to yield some 60,000 casualties. Consequently, while the total number of terrorist incidents worldwide has declined over the years, intelligence estimates indicate that the overall likelihood of a terrorist attack in the United States involving a WMD has actually increased.¹⁹

Additionally, nuclear, biological, and chemical weapons have proliferated despite Congress' Cooperative Threat Reduction program with Russia, and the presence of such arms control regimes as the Chemical Weapons Convention (CWC) and Biological Weapons Convention (BWC).²⁰ Russia's inability to maintain accurate accountability of all

of its WMD remains a source of concern; and Iran, Iraq, Libya, and North Korea, among others, continue to increase their chemical and biological stockpiles despite, in some cases, being signatories to one or both of these conventions. A WMD attack, whether delivered overtly by missiles or covertly by other means, could result not only in massive casualties, disruption or degradation of information infrastructures, contamination of public health systems and foodstuffs, and degraded response capabilities, but also in economic damage, loss of strategic world position, social-psychological damage, and undesirable political change.²¹

Finally, one must consider the potential menace to U.S. information systems posed by cyber attacks. The number of documented computer intrusion events has increased from 1,334 in all of 1993 to 8,800 in the first 6 months of 2000.²² The Computer Security Institute estimates that computer crime in the United States doubled in 1999, causing nearly \$10B in financial losses.²³ Because the sectors of the critical infrastructure of the United States—information and communications, vital human services, energy, physical distribution networks (e.g., waterways, bridges), and banking and finance—are becoming increasingly tied together electronically, cyber attacks can have a devastating effect on them as well. The Presidential Commission on Critical Infrastructure Protection assessed the vital human services and information and communications sectors as highly vulnerable to computer attack. The energy, physical distribution, and banking and finance sectors were classified as either well-protected or relatively resilient to an attack.²⁴ Nonetheless, as the Director of the Central Intelligence Agency testified before Congress in February 2000, the foreign cyber threat continues to grow. More than one dozen countries, including Russia and the People's Republic of China, have developed or are developing the means to launch strategic-level cyber attacks.²⁵

Today's threat environment reflects the influences of a faster-paced and more interconnected world. In this environment, the traditional notion that "a threat = capabilities x intentions" remains valid, but requires more emphasis on potential threats than previously. Few of those states or nonstate actors that might wish to do the United States harm currently possess the capability to do so. Yet, even a slight increase in the rate of proliferation of long-range missile technologies and WMD means that our adversaries can acquire that capability sooner than we expect, perhaps sooner than we can implement counter-measures. In addition, computer "glitches" such as the Y2K bug possess no intent at all, but can nonetheless undermine national security when they become active. Accordingly, policymakers must now focus as much on possibilities as on probabilities, as much on vulnerabilities as on threats. Put differently, an effective homeland defense might require treating vulnerabilities as seriously as confirmed threats under the traditional reckoning.²⁶

Definition of HLS and Mission Areas.

The U.S. Government needs to develop a comprehensive definition of HLS to provide a uniform basis for coordinating the efforts of all federal agencies and for deriving mission areas, tasks, and responsibilities for each. Remarkably, however, HLS has not yet been authoritatively defined, either at the interagency level or by the defense community.²⁷ Part of the reason for this is the disagreement over whether the definition should address only the requirement to "deter and defend against foreign and domestic threats" or whether it should encompass "all hazards," including natural and man-made disasters. Some views, such as those offered by RAND Arroyo, favor the former—a more circumscribed definition—because it provides a clear distinction between "military activities" and the "activities of civilian organizations."²⁸ They argue that such distinctions will reduce damage to the military's image, which could suffer harm if it is perceived as doing

either too little or too much. Unfortunately, definitional clarity will not necessarily preclude misperceptions of whether the military has actually done too little or too much in any particular HLS situation. Furthermore, a circumscribed definition tends to make the problem fit the tools available; and would thus not help expose potential organizational or procedural weaknesses in the ways the U.S. Government and the Joint community propose to protect the homeland.

In the absence of an authoritative definition, the Army has rightly developed and tentatively approved the following "all-hazards" definition in its *HLS: Strategic Planning Guidance* (Draft dated Jan. 8, 2001):

Protecting our territory, population, and infrastructure at home by deterring, defending against, and mitigating the effects of all threats to US sovereignty; supporting civil authorities in crisis and consequence management; and helping to ensure the availability, integrity, survivability, and adequacy of critical national assets.

Such a definition avoids dividing national security into "domestic" and "overseas" concerns and thereby helps preserve unity of effort in the execution of the national security and national military strategies. Second, it assists in reducing the potentially disruptive impact of an incident in which it is not clear whether hostile intent is involved by enabling the creation of a single chain of command appropriate for either situation. Finally, it facilitates the establishment of priorities and the allocation of resources.

This definition supports the following missions or mission areas described in the draft *HLS Strategic Planning Guidance*:

- *Land Defense*. The Army objective under Land Defense is to be prepared to participate as part of the joint force executing plans for the defense of the United States and its territories.

- *Responding to Chemical, Biological, Radiological, Nuclear, and High-yield Explosive (CBRNE) Incidents.* The Army objective in responding to CBRNE incidents is to organize, equip, and train units to timely, effectively and efficiently support the Lead Federal Agency in its efforts to: (1) reduce the vulnerabilities to CBRNE incidents; and (2) manage the consequences of CBRNE incidents.

- *National Missile Defense (NMD).* In the near-to-mid term the Army's objective is to perform those actions necessary to ensure the successful testing, deployment and operation of a land-based NMD system. The purpose of the NMD system as currently envisioned is to provide protection against limited ballistic missile attacks targeted at the United States. This protection will be achieved through integration of the NMD system elements with Integrated Tactical Warning and Attack Assessment (ITW/AA). The Army's Operational Concept for NMD can be found in TRADOC PAM 525-82.

- *Combatting Terrorism.* The Army objective under Combatting Terrorism is to provide training, staffing and equipment resources and services to support domestic emergencies consistent with national security priorities, Federal Response Plan criteria, and U.S. Code dealing with employment of military forces within the United States.

- *Critical Infrastructure Protection (CIP).* Protecting and defending critical infrastructure, including information and information systems. Army support will likely consist of equipment and forces to prevent the loss of, or to assist in restoring, telecommunications, electric power, gas and oil, banking and finance, transportation, water, emergency services, and government continuity. The Army objective under CIP is to develop a capability to ensure the availability, integrity, survivability, and adequacy of those assets deemed critical to the United States.

- *Information Operations (IO).* The Army objective under IO is to provide information operations in support of HLS efforts. Information operations are defined as

defensive and offensive operations taken to affect adversary information and information systems while defending one's own information and information systems. While there are situations where a retaliatory IO offensive strike directed at an external entity might be undertaken to stop an ongoing attack, the general expectation is that HLS IO missions will be defensive in nature.

- *Military Assistance to Civil Authorities (MACA)*. The Army objective under MACA is to provide essential support, services, assets, or specialized resources to help civil authorities deal with situations beyond their capabilities. MACA includes all of the actions that can be taken under the disaster-related Military Support to Civil Authorities (MSCA).

As this list reveals, the Army's HLS missions span a broad spectrum. In addition, they take place in parallel with other activities reflected in the Army's Spectrum of Operations. As Figure 1 illustrates, the Army's HLS missions correspond to low- and high-end operations based on their frequency and magnitude. For example, Environmental Operations, which are often high in frequency but low in magnitude, correspond with the left or low-end of the spectrum. Last year's fire-fighting activities in the northwestern United States were significant events for the soldiers involved, but those activities did not tax the Army's (or DoD's) resources to the degree that a WMD attack would have.

By contrast, operations at the right end of the spectrum tend to occur less frequently, if at all, but demand more resources, and often of a specific kind. The exception to this rule is Domestic Relief, which can occur anywhere along the spectrum depending upon the size of the incident. As a general rule, then, those incidents with the lowest probability of occurrence could result in the most severe consequences and, accordingly, would require the greatest amount of resources.

National Security Requirements

Spectrum of Operations

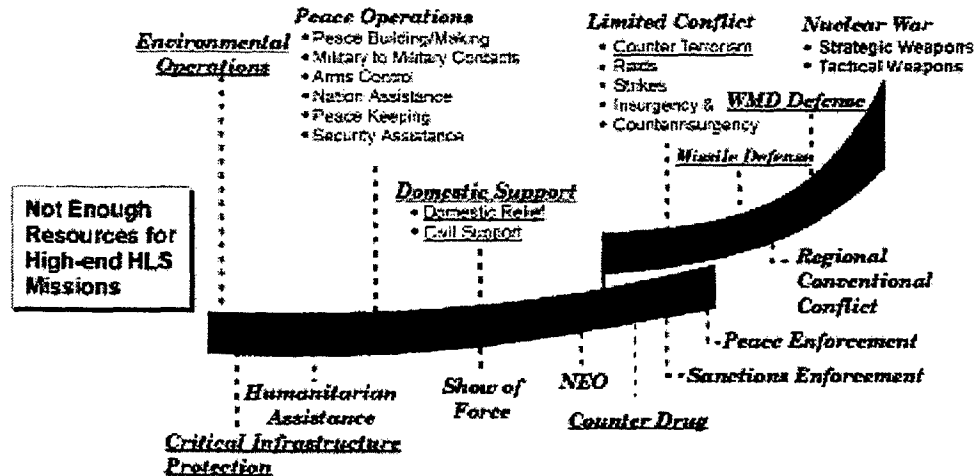


Figure 1.

It is doubtful that most low-end HLS missions would prevent the Army from executing a two-MTW scenario. However, it is almost certain that some high-end HLS missions would. A WMD incident, for example, could require sufficient resources to halt or interrupt the flow of forces from the continental United States (CONUS) and thereby seriously affect the commander-in-chiefs' (CINCs) war plans. Since defense officials currently assess the risk to U.S. forces as "moderate" for the first MTW and "high" for the second, any disruptions in the flow of forces would compound an already acute strategic dilemma.

As a minimum, therefore, the Army should develop a HLS force-sizing metric for its high-end missions, specifically its WMD and NMD missions (and possibly Domestic Relief, though it is not clear under what circumstances it would cause the NCA to halt the flow of forces overseas). Moreover, the process of developing such a metric would help the Army (and the defense establishment at large) to refine the full range of potential HLS missions, develop planning factors, assess requirements, identify

areas of possible conflict between HLS and warfighting missions, and determine how to develop a force to fit the metric.²⁹

A Force-sizing Metric for HLS.

WMD. It is difficult to forecast with precision the number and type of resources a WMD incident would require. The variables involved are too numerous and diverse for hard-and-fast rules. Planners at Joint Forces Command Task Force for Civil Support (JTF-CS) have nonetheless used the best information available from the Defense Threat Reduction Agency (DTRA) to develop draft "playbooks" that offer an estimate of the resources required to respond to three possible high-end events: the detonation of a 10KT nuclear device; a persistent chemical strike; or the discharge of a high-yield explosive device.³⁰

By these estimates, the resources required to respond to the detonation of a 10KT nuclear device include: four (light) infantry battalions; five medical companies; three chemical battalions; three engineer construction battalions; three military police companies; four ground transportation battalions; an aviation group; three direct support maintenance battalions; and two general support maintenance battalions. Resources required to respond to a persistent chemical strike or to an incident involving the detonation of high-yield explosives would amount to some 30 percent of those required for a 10KT nuclear event. While these numbers might appear small, it is important to remember that the loss of even a single medical, chemical, or signal element can render larger units non-mission capable for the prosecution of an MTW.

Naturally, a combination of incidents would require more resources. However, that amount might not equal the simple sum of resources required for each incident. A combination of incidents could well produce a negative synergy that would require more resources. Yet, it might

also result in a reduced resource demand overall depending upon the timing and proximity of the events.

Since an infinite number of scenarios are possible, the Army requires a force-sizing metric that balances resources and requirements within acceptable risk parameters. The Probability-Severity Matrix included as Figure 2 represents one possible framework for such a force-sizing metric. Cross-indexing the probability of an event with its anticipated severity produces a Probability-Severity Index (SI) that can also serve as a resource baseline. For instance, an SI equal to one 10KT incident (the detonation of a nuclear device the size of a 55 gallon drum) reflects probability of occurrence that is greater than that of a 15KT incident, but lower in severity.

The Army might, for example, consider establishing a force-sizing metric capable of addressing an SI of 2x10KT events, which would accommodate any number of scenarios in which one or two nuclear devices are brought into the United States covertly. A scenario involving three or more devices suggests that the perpetrators have access to considerable resources—not only weapons but also means of transportation and concealment—and that they have planned a well-coordinated assault. In such a case, the United States would probably be engaged in a war for national survival in which "all bets are off" and the National Command Authority would likely direct all resources against the perpetrators, assuming they could be identified. In addition, a resource baseline capable of addressing 2x10KT events would enable the Army to respond to several incidents, such as a 1x15KT or 1x22KT incident, or approximately 3x1KT nuclear incidents, or three biological or chemical attacks.³¹

NMD. Ideally, NMD would include a robust, multi-layered defensive system consisting of space, air, sea, and land weapons capable of long-range—strategic—defense as well as shorter-range—theater—defense. Although it seems clear that the United States will erect

some form of NMD, support for it is far from unanimous, for technical and political reasons.

Probability-Severity Index

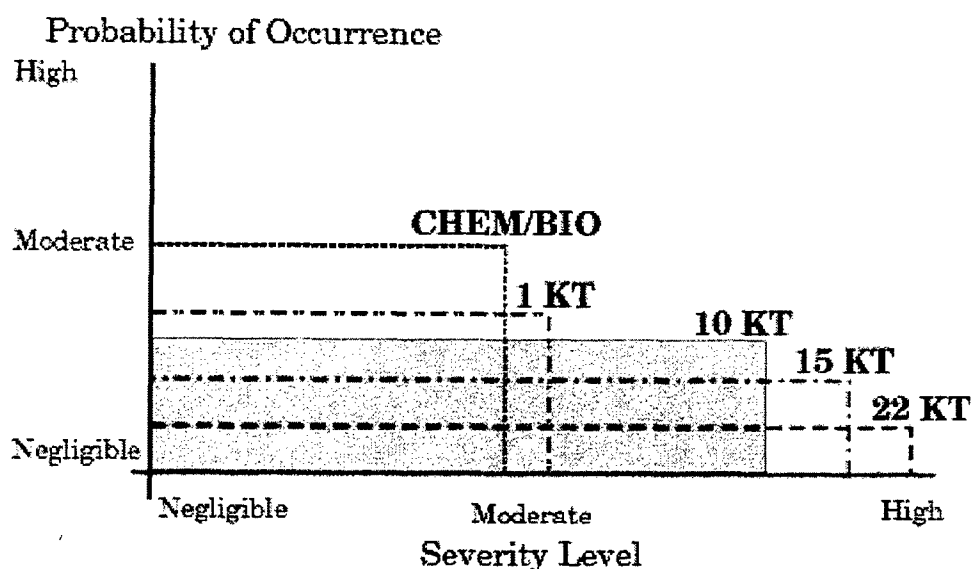


Figure 2.

The technical argument, presented by such outspoken critics as Dr. Theodore Postol, is that the technology does not exist (and probably never will) to enable an interceptor to distinguish a real missile from the chaff or decoys that inevitably accompany it. However, experts at the U.S. Space and Missile Defense Command have successfully refuted this argument by showing that Postol's claims pertained to an obsolete version of interceptor technology.³²

The political argument for not building an NMD, proffered most conspicuously by Russia and China, is that implementation will cause an expensive and dangerous arms race, or have an otherwise destabilizing influence worldwide.³³ However, this is a specious argument. An arms race is essentially already underway as evidenced by the proliferation of missile technology. An NMD, which is a

defensive system, not an offensive one, and presumably can be extended to our friends and allies, serves as a necessary counterweight to the dangers inherent in proliferation. In a manner of speaking, it represents a "threat" primarily to those states inclined to use their offensive missile capabilities to threaten others. Rather than exerting a destabilizing influence, in fact, NMD could contribute to maintaining or restoring peace and stability by precluding a "state of concern" from using its ballistic missiles to deter the United States or its allies from intervening in a regional crisis.

Another component of NMD is a shorter-range antimissile system capable of defeating cruise missiles. Such a system would also meet some requirements for force protection as well as the defense of critical infrastructure. The type and number of systems required would naturally depend upon a careful analysis of such factors as mission, enemy, troops, terrain, and time (METT-T). Excluding the understandable desire to provide an anti-missile shield over every major U.S. port or city, the defense of only critical ports and airfields along the east, west, and Gulf coasts, and the Great Lakes would still require a large number of systems. For example, some 147 Nike-Ajax and Nike-Hercules air-defense sites were constructed in the United States during the Cold War.³⁴

To be sure, the Army's force-sizing metric will also have to include the other HLS mission areas. However, those most likely to have an impact on the force structure necessary for the U.S. military to execute 2MTWs are WMD and NMD.

Developing a HLS Force.

Once the Army has developed a force-sizing metric for HLS, it will need to examine the options available for filling that metric. Two of the more popular options are described below:

1. Add HLS as a "third MTW" to the current two-MTW force-sizing metric and assign high-end missions to an appropriate number of Army National Guard (ARNG) divisions (along with full-time soldiers as necessary).

2. Convert the current two-MTW force-sizing metric into one overseas MTW (or multiple smaller-scale contingencies) and one within CONUS for HLS missions.

Option 1 has the advantage of maintaining a larger force for deterring aggression or, if necessary, for defeating an adversary quickly and decisively. It also retains more forces for executing smaller-scale contingencies abroad—which many strategists claim will characterize the strategic environment for the foreseeable future—and reducing the excessively high operational tempo for the Army overall. In addition, it reduces the risk that unforeseen crises would draw units away from transformation. Furthermore, the stability that most ARNG units enjoy would enable their personnel to become well-established in their communities and develop critical working relationships with local law enforcement, fire departments, paramedics, and other emergency response organizations. (In many cases, ARNG and Reserve personnel are also local "first-responders" and that could pose a challenge unless planned for beforehand.) Such relationships can aid communications efforts among responding authorities and help reduce the inevitable fog and friction that would attend a major incident.³⁵

However, reequipping an appropriate number of full-time ARNG divisions for WMD response and missile defense of the homeland will require substantial additional funds. The Army would also have to de-conflict any warfighting missions that might already have been assigned to some of those units.

Option 2 comes in a variety of forms. Fundamentally, it has much in common with any option—such as focusing on smaller-scale contingencies—that calls for scaling back the number of MTWs the U.S. armed forces must address, or eliminating them altogether. Overall, this option has the

advantage of directing more resources toward HLS without increasing the total amount of defense spending. It is possible that this option would even allow for further reductions in force structure, thereby freeing funds for redirection to other federal agencies so as to increase border security, drug interdiction activities, and critical infrastructure protection.

However, it has significant disadvantages in that it reduces U.S. influence overseas, as well as U.S. ability to deter war or to fight more than one major conflict at a time. This option would require changing U.S. strategy to "win-hold-win" and thus would mean placing more emphasis on (and ultimately more funding in) Halt-phase operations to stop an aggressor's advance in one theater while a friendly counteroffensive takes place in another. Yet, as the results of the Kosovo campaign indicate, one-dimensional operations—which currently characterize the Halt-phase concept—entail a high degree of risk and tend to produce ambiguous results. In short, option 2 trades flexibility in crisis response for better protection at home.³⁶

In sum, each option would cause defense planners and strategists to address HLS and national security as a single, integrated activity. Each would also place the desired emphasis on HLS missions. However, only option 1 permits the United States to address high-end HLS missions while retaining its present capability to deter war and to fight and win two conflicts simultaneously.

At the same time, this comparison illustrates that the two-MTW force-sizing metric has *outlived its usefulness*.³⁷ The two-MTW metric fails to capture, for example, the requirements for HLS, not to mention those associated with other missions, such as peacetime engagement. The Army should consider whether another metric would enable it to quantify and communicate its force structure requirements more accurately.

Clearly, HLS requirements must be imbedded in whatever overall force-sizing metric is chosen. In any case,

the major conclusion of this monograph—that the Army needs to develop a HLS force-sizing metric—remains valid even if the overall two-MTW force-sizing metric is changed.

Recommendations.

In summary, this monograph recommends that the Army do the following:

- Consider alternative force-sizing metrics that include high-end HLS missions as a minimum;
- Advocate development of an NMD system to include defense against cruise missiles;
- Continue to emphasize the importance of HLS in the development of national security and national military strategies.

Whether and to what extent the United States is attacked in the future will depend a great deal upon how its potential adversaries perceive the measures taken to defend it. If prudent steps have been taken, fewer opportunities will exist for harm, and the United States will find itself in a better position to mitigate the effects of harm should it occur.

ENDNOTES

1. For a summary of the Army's contribution to the "common defence," see Gregory J. W. Urwin, "The Army of the Constitution: The Historical Context," in Max G. Manwaring (ed.), "*... to insure domestic Tranquility, provide for the common defence . . .*" Carlisle, PA: Strategic Studies Institute, 2000, pp. 27-62.

2. For the purposes of this monograph, WMD refers to chemical, biological, nuclear, radiological, and high-yield explosives as well as those generally referred to as weapons of mass effect (WME), such as electro-magnetic pulse or computer viruses. The term "weapons of mass destruction" is controversial. Mike Osterholm and John Schwartz, *Living Terrors: What America Needs to Know to Survive the Coming Bio-terrorist Catastrophe* (New York: Delacorte Press, 2000) point out that the term conveys the sense that defense against such weapons is

primarily a military or police concern rather than one affecting all citizens.

3. Phillip A. Odeen, *et al.*, *Transforming Defense: National Security in the 21st Century* (Arlington, VA: National Defense Panel, December 1997), was one of the first documents to raise homeland defense as a strategic concern.

4. While recent indications are that the 2MTW force-sizing metric will soon change, this monograph resulted from a tasking to investigate homeland security within the context of 2MTWs. For indications that the Joint community is considering abandoning the 2MTW metric, see Elaine M. Grossman, "Military Makeover: Fight two wars at once? That's old thinking," *Boston Globe*, January 7, 2001, p. D1.

5. Many analysts, in fact, maintain that not only does the U.S. military lack the forces for a 2MTW scenario, but the force-sizing metric itself is antiquated and does not reflect the full range of today's strategic requirements. See Steven Metz, ed., *Revising the Two MTW Force Shaping Paradigm*, Carlisle, PA: Strategic Studies Institute, Forthcoming, 2001.

6. An example of such a discussion is Michael O'Hanlon, "Rethinking Two War Strategies," *Joint Force Quarterly*, Spring 2000, pp. 11-17, which proposes an additional 10 percent cut in U.S. armed forces, but fails to mention homeland defense. Such omissions are due in part to DoD's position that it will play a supporting role in homeland defense and its failure to define better the full range of HLS missions and their potential overlap with warfighting missions—a deficiency addressed in the recommendations of Michèle A. Flournoy, *Quadrennial Defense Review 2001 Working Group*, Washington, DC: National Defense University, November 2000, p. 60. Nonetheless, a vast amount of material on HLS issues does exist. See, for example, the recent publications on homeland defense by the Center for Strategic and International Studies and the *Journal of Homeland Defense* (www.homelanddefense.org) .

7. Public pronouncements by key members of the new administration suggest that the United States will remain engaged in the world. See, for example, the speech of Dr. Condoleezza Rice, the Bush administration's National Security Advisor, at the Fletcher Conference, November 15, 2000; and Condoleezza Rice, "Promoting the National Interest," and Robert B. Zoellick, "A Republican Foreign Policy," *Foreign Affairs*, January/February 2000, pp. 45-62, 63-78, here 45 and 70, respectively.

8. In a speech to the National Academy of Sciences on January 22, 1998, President Clinton assured the public that those demands would be met, declaring that even in the face of a growing bioterrorist threat, the government would remain committed to upholding "privacy rights and other constitutional protections, as well as the proprietary rights of American businesses."

9. Thomas R. Lujan, "Legal Aspects of Domestic Employment of the Army," *Parameters*, Vol. 27, No. 3, Autumn 1997, pp. 82-97, offers an excellent summary of legal lessons learned from selected domestic employments of the Army during the 1990s.

10. A useful summary of key aspects of the U.S. homeland and their vulnerabilities to asymmetric attack is provided in Kenneth F. McKenzie, Jr., *The Revenge of the Melians: Asymmetric Threats and the Next QDR*, McNair Paper No. 62, Institute for National Strategic Studies, November 2000, pp. 60-64, Table 7. *Global Trends 2015: A Dialogue about the Future* (<http://www.cia.gov/cia/publications/globaltrends2015>) states that asymmetric approaches will become the "dominant characteristic" of most threats to the U.S. homeland.

11. Donald H. Rumsfeld, *et al.*, *The Report of the Commission to Assess the Ballistic Missile Threat to the United States*, Washington, DC, July 15, 1998, pp. 8-9.

12. Institute for Foreign Policy Analysis, *Exploring U.S. Missile Defense Requirements in 2010*, Washington, DC: IFPA, April 1997, p. 6-9.

13. *Cruise Missile Threats; and Emerging Cruise Missile Capabilities*, Center for Defense and International Security Studies, <http://www.cdiss.org/cmthreat.htm>; *Ballistic and Cruise Missile Threats*, National Air Intelligence Center, NAIC-1031-0985-98, <http://www.fas.org/irp/threat/missile/taled.htm>. The Institute for Foreign Policy Analysis, *Assessing the Cruise Missile Puzzle: How Great a Defense Challenge?* (Washington, DC: IFPA, November 2000), p. 3, reports that 80,000 cruise missiles comprised of 75 different types are deployed in 81 different countries.

14. <http://www.ceip.org/programs/npp/cruise4.htm>.

15. The United States Commission on National Security/21st Century, *Seeking a National Strategy: A Concert for Preserving Security and Promoting Freedom*, April 15, 2000; and the Report of the National Commission on Terrorism, *Countering the Changing Threat of International Terrorism*, The Terrorism Research Center, June 7, 2000.

Some critics maintain, however, that as dramatic as terrorist attacks are, "to call them a serious threat to national security is scarcely plausible." John and Karl Mueller, "Sanctions of Mass Destruction," *Foreign Affairs*, Vol. 78, No. 3, May/June 1999, pp. 43-53. This view is successfully rebutted by Patrick L. Moore, "Is Catastrophic Terrorism Just Strategic 'Peanuts?'" *National Security Law Report*, Vol. 22, No. 4, July-August 2000, pp. 1, 5-6.

16. *Terrorism in the United States 1996*, Washington, DC: FBI, <http://www.ncvc.org/stats/dt.htm>; and *Anti-US Attacks, 1987-97*, Director of Central Intelligence, Counterterrorist Center, <http://www.cia/di/products/terrorism/attacks.gif>; and *Total Casualties Worldwide, 1987-1997* (graph), <http://www.cia/di/products/terrorism/worldwide.gif>.

17. *Global Trends 2015*, <http://www.cia.gov/cia/publications/globaltrends2015>.

18. Hon. John Train, "Who Will Attack America?" *Strategic Review*, Fall 2000, pp. 11-15.

19. *Global Trends 2015*. Amy E. Smithson and Leslie Anne Levy, *Ataxia*, Stimson Center Report No. 35, contend that terrorist use of BW and CW will remain difficult. See also Bruce Hoffman, "Terrorism by Weapons of Mass Destruction: A Reassessment of the Threat," in *Transnational Threats: Blending Law Enforcement and Military Strategies*, Carolyn W. Pumphrey, ed., Carlisle, PA: Strategic Studies Institute, November 2000, pp. 85-104. Hoffman essentially argues that terrorists cannot overcome the difficulties of employing WMD, and so will not use them. His argument is successfully defeated by Victor Utgoff, "Bruce Hoffman's View of Terrorism by Weapons of Mass Destruction: Another Perspective," pp. 133-136, in the same volume. See also Walter Laquer, *The New Terrorism*, New York: Oxford, 1999.

20. Richard Latter, "Chemical and Biological Weapons: Forging a Response to a Twenty-first Century Threat," Wilton Park Paper, October 2000, points out that, while 139 states have signed the CWC and 27 of 61 declared CW production facilities have been destroyed thus far, concerns remain over clandestine programs and the absence of Middle Eastern and North-east Asian states as signatories. Similarly, the BWC is hampered by the absence of any arrangements to verify compliance. On the need to bolster CW and BW arms control regimes, see: Jonathan B. Tucker and Kathleen M. Vogel, "Preventing the Proliferation of Chemical and Biological Weapon Materials and Know-How," *The Nonproliferation Review*, Vol. 7, No. 1, Spring 2000, pp. 88-96, esp. 95; Marie I. Chevier, "Strengthening the International

Arms Control Regime," in *Biological Warfare: Modern Offense and Defense*, Raymond A. Zilinskas, ed., Boulder: Lynne Reinner, 2000, pp. 149-176; and Laurie Garrett, "The Nightmare of Bioterrorism," *Foreign Affairs*, January/February 2001, pp. 76-89.

21. Much depends upon the social and historical context of the attack. *The Landmark Thucydides: A Comprehensive Guide to the Peloponnesian War*, Robert B. Strassler, ed., (New York: Simon & Schuster, 1998); and Giovanni Boccaccio, *The Decameron*, Jonathan Usher, trans., (New York: Oxford University Press, 1998), provide examples of how an epidemic can cause political and social chaos. However, the great flu epidemic of 1918, devastating as it was, caused no such disruption. Gina Kolata, *Flu: The Story of the Great Influenza Pandemic of 1918 and the Search for the Virus that Caused it* (New York: Touchstone, 2001). Henry W. Fischer III, *Response to Disaster: Fact Versus Fiction & Its Perpetuation*, 2d ed., (New York: University Press of America, 1998), indicates that chaos will be a typical organizational response, but not for individuals, provided they are kept well-informed.

22. Computer Emergency Response Team (CERT) Coordination Center, www.cert.org/stats/cert_stats.html.

23. Charles Piller, "Cyber-Crime Loss at Firms Doubles to \$10 Billion," *Los Angeles Times*, March 22, 2000; cited from F. G. Hoffman, *Homeland Defense: A Net Assessment*, Washington, DC: Center for Strategic and Budgetary Assessments, Forthcoming 2001.

24. Robert T. Marsh, *Critical Foundations: Protecting America's Infrastructure*, Washington, DC: President's Commission on Critical Infrastructure Protection, October 1997, pp. 11-20, Appendix A.

25. Hoffman, *Homeland Defense*.

26. For supporting views on the need to change the traditional definition of a threat, see Colonel Randall J. Larsen, U.S. Air Force (Retired) and Ruth A. David, "Homeland Defense: Assumptions First, Strategy Second," *Strategic Review*, Fall 2000, pp. 4-10; and Phillip E. Lacombe, "Daniel T. Kuehl's View of DOD's Role in Defending the National Information Infrastructure: Another Perspective," in *Transnational Threats*, pp. 163-172.

27. Ashton B. Carter, "Keeping America's Military Edge," *Foreign Affairs* (January/February 2001), pp. 90-105, esp. 94, in fact, lists homeland defense as one of the "homeless missions" that are accomplished in an "ad-hoc fashion by unwieldy combinations of

departments and agencies designed a half-century ago for a different world."

28. Eric V. Larson and John E. Peters, DRAFT, *The Army Role in Homeland Defense: Concepts, Issues and Options*, RAND Arroyo Center, October 1999, pp. vi-xvii.

29. See *Quadrennial Defense Review 2001*, p. 60, for similar points cast as recommendations.

30. Playbooks for other scenarios are under development, but have not yet progressed to the draft stage.

31. The baseline of 2x10KT also accords roughly with a RAND draft study, October 1999, that proposed planning guides of one 22KT nuclear incident of 100,000 casualties, three chemical attacks of 5,000 casualties each, and three biological attacks of 10,000 casualties each.

32. Lieutenant General John Costello, Commander USASMD, briefing presented at the Annual U.S. Army Space and Missile Defense Command Conference, August 22, 2000. Dr. Postol was invited, but declined to participate in the conference. See also The Institute for Foreign Policy Analysis, *National Missile Defense: Policy Issues and Technical Capabilities*, July 2000, Final Edition. Nonetheless, criticism of developing an NMD continues; see "Missile Shield Illusions," *New York Times*, on the web, January 10, 2001.

33. There are also issues with the 1972 ABM Treaty that remain to be resolved. R. James Woolsey, "The Way to Missile Defense: Dealing with Russia and Ourselves," *National Security Law Report*, Vol. 22, No. 3, May-June 2000, pp. 1-2, 5-6, provides a brief discussion of the provisions of the ABM Treaty and suggests how it might be changed. He also discusses a cheaper alternative that would employ satellites.

34. <http://www.zianet.com/dpiland/ordnance/wspg.htm>.

35. The advantages and disadvantages of using Army Reserve (and by extension some ARNG forces) in a HLS role are discussed in Charles L. Mercier Jr., "Terrorists, WMD, and the US Army Reserve," *Parameters*, Vol. 27, No. 3, Autumn, 1997, pp. 98-118.

36. On the limited efficacy of air operations in the Kosovo campaign, see Admiral Bill Owens, *Lifting the Fog of War*, New York: Farrar, Straus, & Giroux, 2000, pp. 181-183. For a critique of the Halt-phase concept, see Earl H. Tilford, Jr., *Halt Phase Strategy: New Wine in Old Skins . . . with Powerpoint*, Carlisle, PA: Strategic Studies Institute, 1998.

37. For a discussion of force-sizing alternatives, see Metz, *Revising the Two MTW Force Shaping Paradigm*.

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Command and Control in Domestic Maritime Disaster Response Operations

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NAVAL WAR COLLEGE

Newport, Rhode Island

Command and Control

in

Domestic Maritime Disaster Response Operations

by

James J. Jones
Lieutenant Commander
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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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Introduction

The United States Coast Guard (USCG), the nation's federal maritime emergency response agency, has responded to a number of major maritime disasters in the last few years, which have highlighted the need for efficient command and control (C2). These multi-agency, multi-jurisdictional domestic maritime disaster response operations (DMDRO) have reinforced a highly visible precedent of federal assistance in such cases. This precedent along with the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Public Law 93-288, as amended)¹ ensures that the federal government will respond to natural disasters and other incidents in order to assist local and state agencies whenever necessary. Therefore, action should be taken to promote efficient use of manpower and resources and prevent the *ad hoc* command and control arrangement that arises with each new DMDRO.

Domestic Maritime Disaster Response is an issue for the operational commander because it requires massive and immediate deployment of resources to offer the best hope of finding survivors and preserving evidence. Upon cessation of rescue efforts, the investigative process to determine the cause of the disaster and any criminal involvement often must be done in a similarly urgent fashion albeit with less tolerance for risk to personnel and equipment. Depending on how the operational commander is defined (USCG-District or Group Commander; USN-CINC or sub-unified commander; or NTSB lead investigator) DMDRO can affect civil-military relations, mission readiness, ability to respond to other crises, unit preparedness, budgets, etc. Thus, the operational commander must have a smoothly functioning C2 element to ensure that each phase of DMDRO is carried out safely and efficiently. Recent examples illustrate that this has not always been the case.

These recent examples of DMDRO include: three major passenger jet crashes (TWA Flight 800 in 1996, Egypt Air Flight 990 in 1999, and Alaska Airlines Flight 261 in 2000), one highly visible private plane crash (John F. Kennedy Jr. in 1999), and two vessel groundings (M/V NEW CARISSA off the Oregon coast in 1999 and the M/V EXXON VALDEZ in Prince William Sound, Alaska in 1989). While these are so-called "man-made" disasters, natural occurrences such as Hurricane Andrew and the Mississippi River floods have an obvious maritime component and often involve coordinated federal action. Since both man-made and natural disasters will inevitably continue to occur the federal government and particularly the military will continue to be called upon to provide assistance.

The precedent for federal assistance in domestic disaster response was set in the 1800's when the military was used to respond to disasters such as the Chicago fire of 1871. Later, in 1917, the War Department issued guidance on disaster relief.² As technology advanced throughout the 1900's the federal government and the military in particular became a place where states could turn to find abundant resources and modern equipment for disaster response. Events that would have remained regional or national at most began to receive international attention through routine air travel, a global economy, and a news media that reaches every corner of the globe. Local and state resources are quickly overwhelmed necessitating federal oversight and coordination when an oil tanker runs aground and spills 11 million gallons of crude oil or when a commercial passenger jet crashes with citizens from all over the world on board. Added to these developments is the recent increase in concern over the possibility of a weapon of mass destruction (WMD) being deployed in the United States. If such an attack were perpetrated from the sea such as an explosion in a major port like Los Angeles-Long Beach or next to a major

metropolitan area such as Manhattan, the military is almost solely qualified to mitigate the damage and provide assistance to the victims. Major Scott Taylor, Major Amy Rowe, and Commander Brian Lewis note in their article on WMD Consequence Management, "Recent experience suggests that our citizens want a swift and comprehensive [federal] response to disasters of all kinds."³ While it is not the intent of this paper to address WMD, this is illustrative of how the federal government's role in disaster response is evolving thus reinforcing the precedent.

The operational commander must be prepared to respond to all types of disasters particularly those in the maritime domain since state and local governments have very limited ability to sustain operations at sea. Therefore, since C2 is such a vital component of any large-scale DMDRO, the operational commander needs to have clear doctrine to draw from as well as a solid understanding of the many variables, which come into play. A closer look at two of the cases mentioned, Egypt Air Flight 990 and Alaska Airlines Flight 261, will demonstrate shortcomings in the C2 system, point to some progress that has been made, and reveal some of the variables inherent in DMDRO.

"To the Navy, this was not a war. To the Coast Guard, it was."⁴ This was the attitude of the USCG when Egypt Air Flight 990 crashed approximately 60 miles south of Nantucket Island, Massachusetts on 31 October 1999. This case, like TWA 800 three years before, rapidly escalated into a DMDRO. The U.S. Air Force (USAF) and the USCG initiated rescue efforts immediately with the USCG Group Commander in Woods Hole, Massachusetts assuming the duties of operational commander. The National Transportation Safety Board (NTSB) and Federal Bureau of Investigation (FBI) assumed investigative jurisdiction at the request of the Egyptian government. This request was necessary due to the International Civil Aviation Organization treaty which stipulates that

the country of registry has jurisdiction over aviation accidents in international waters.⁵ As rescue efforts progressed the U.S. Navy (USN) formed Task Group 20.9 to assist in the search for survivors and to begin setting up for recovery and salvage operations.⁶ An Incident Command Post was established at Naval Station Newport, Rhode Island to provide a base of operations. The operational commander encountered numerous C2 problems, which were noted in a comprehensive lessons learned database. After the following discussion on Alaska Airlines Flight 261, these lessons learned will be compared to those produced from the Alaska case.

Alaska Airlines Flight 261 crashed in the Pacific Ocean about nine miles off the coast of Port Hueneme, California on 31 January 2000. The USCG launched a search immediately and received assistance from many local boaters as well as county and state emergency response agencies. The USCG Group Commander out of Long Beach, California was designated operational commander and established Naval Construction Battalion Center Port Hueneme as the base of operations. Since the crash occurred in U.S. territorial waters the NTSB and FBI assumed responsibility for the safety related investigation and the potential criminal investigation, respectively. Commander, Third Fleet was tasked with providing salvage and recovery assets which were deployed from San Diego. Having had the opportunity to review after action reports from the TWA 800 and Egypt Air 990 operations, the operational commander in the Alaska Air 261 case implemented many of the lessons learned, but still experienced C2 problems that appear to be common in such cases.

Analysis

Egypt Air 990 and Alaska Air 261 were similar in many respects even though they occurred on different coasts, had different causes, and different players.⁷ In both

cases the operational commander used the Incident Command System as a management tool and set up his Incident Command Post on a large USN facility. Both cases involved a large number of USCG and USN personnel and resources with NTSB as the lead investigative agency. The FBI also had a major interest in the Egypt Air 990 crash due to potential criminal involvement. These points are reiterated to stress the illustrative nature of the cases. Given these cases are typical of the courses of events and interactions that normally take place in DMDRO they permit certain conclusions to be drawn regarding their nature especially the command and control function that was present. To demonstrate these conclusions regarding C2 there are six factors to be considered. These are: organizational culture, rank structure, management systems, communications, locations, and stages. (Note: The main focus of this analysis will be the USCG and USN with some discussion of the NTSB as appropriate. The FBI will not be considered since it had a different degree of involvement in each of the cases. It is recognized that the FBI would assume a lead investigative role in the event a maritime disaster was the result of criminal activity.)

Organizational Culture – This is the first area where USCG, USN, and NTSB encounter difficulty in DMDRO. The USCG is a military organization with a search and rescue mission. The USCG C2 infrastructure, oriented toward a civilian fire/police dispatch model, is designed to handle the majority of maritime emergencies. This infrastructure contains all the elements of a typical emergency response agency, i.e. fully integrated long range communications, equipment and personnel in a 24-hour readiness status (includes vessels and aircraft), well-established standardized procedures, and a clear chain of command wherein the senior ranking person on scene is given a great deal of latitude in decision-making.⁸ USCG culture also dictates that planning and exercising

for DMDRO occurs annually to bi-annually depending on the complexity of the geographic area.

The USN culture is similar to the USCG regarding maritime tradition. However, it is an organization in which the main focus is maritime power projection overseas. This focus on large-scale operations usually translates to bringing hundreds of people, several ships, and a large amount of equipment to the scene when the USN is called upon to participate in DMDRO. The people and equipment that deploy for DMDRO typically arrive with their own C2 structure, which usually includes higher-ranking officers, and a centralized decision-making system that limits the autonomy of the vessel and aircraft commanders at the scene of a disaster. This contrast to the USCG philosophy was noted in the following Egypt Air 990 Lessons Learned, "CG OSC's [On-Scene Commander] seem to have a greater degree of autonomy than our Navy counterparts."⁹

The NTSB, as the federal government's lead safety investigator in mass transportation related accidents, is very different from either the USCG or USN. As an agency led by board members requiring senate approval, the NTSB has a great deal of authority in DMDRO. To the casual observer this authority would appear disproportionate to the small number of people NTSB deploys to the scene of an accident. This is deceiving, however, because the lead investigator for NTSB, who, theoretically, could be referred to as the operational commander during the salvage and recovery phase, is a coordinating force directing events and tasking as necessary. Culturally, NTSB is different in that it is narrowly focused, has few organic resources other than people, and a very short chain of command that leads directly to the executive branch of government. This last aspect invites high-level political involvement thus increasing the scrutiny placed on the operational commander.

This difference in organizational culture has not been a showstopper in any DMDRO. The fact that USCG and USN crews have worked together in other operations and venues such as law enforcement operations and training availabilities provides a foundation of understanding. The NTSB is recognized as an agency that works outside of any local command structure and prefers not to participate in any type of joint command structure. For the USCG and USN this usually translates into a parallel C2 structure with interaction taking place at various levels and decisions being made by the lead operational commander following discussions at that level. This concept is viewed as a "unified command" under the Incident Command System. Rather than a single individual serving as the incident commander (a.k.a. operational commander) in multi-jurisdictional events, "the incident commander role is shared....Although this leadership by committee might seem to threaten unity of command, it is actually quite workable because of the cohesiveness provided by a common and immediate threat."¹⁰ The merits of the ICS system will be discussed in more detail later. The point here, however, is that C2 is more challenging in DMDRO due to its tendency to bring large organizations into play with each organization having its own well-established C2 structure.

Rank Structure – Closely related to organizational culture is rank structure. This reference to rank structure does not refer to the pay-grade system, but to the rank structure that a particular agency or military activity uses to facilitate the accomplishment of a mission such as DMDRO. The C2 structure employed by the USN in the two cases under discussion has been staffed with as many as 60 people. This C2 structure with its accompanying array of higher-ranking officers (O5-O6) is juxtaposed to a USCG structure that fields a smaller (usually less than two dozen people) team with a majority of lower ranking junior officers (O2-O3) and senior enlisted personnel. For example,

when the Incident Command Post (ICP) for Egypt Air 990 was set up at Naval Station Newport, an O2 and E8 were sent to set it up and were followed shortly thereafter by the operational commander who was a USCG O6. Even after the operational commander arrived there was a staffing mismatch between the USCG, USN, and other organizations involved in the case. During the response the operational commander was the link to senior officials such as the USN Commodore (a senior Captain) and the NTSB chairman. The USCG O2 and E8 provided the coordination and tasking for the response alongside numerous USN personnel ranging from O2-O5.¹¹ The problem, as noted in a Lessons Learned, was that the junior officer assigned as the operations director had "too little horsepower in dealing with O5s/O6s from the Navy/NOAA as well as senior personnel from the NTSB, [Massachusetts Environmental] Police, and State Police."¹² Although this officer was fully qualified and able to function in this position, a USCG O5 was brought in as a substitute to level the playing field.

In the Alaska Airlines 261 case the situation evolved somewhat differently. The rank structure in the ICP at Naval Construction Battalion Center Port Hueneme was more closely matched with the operations director being a USCG O4. He was able to interface on a one-to-one basis with the operations directors or equivalents of the others services and agencies. The other functional areas of the ICP such as logistics and planning were also staffed by more senior USCG personnel due to the availability of such personnel from the parent command at Marine Safety Office/Group Los Angeles-Long Beach.

The point to be made here is not that there must be absolutely equivalent or even similar ranks when dealing with one another in DMDRO. Experience and ability to perform the job should be the driving factors behind the assignment of personnel in such situations. However, in unfamiliar settings and under emergency conditions people tend

to equate certain rank levels with their own preconceived notion of organizational responsibility. When viewed in light of the organizational culture of the USCG mentioned above, very capable junior people in the USCG, who would otherwise be in the decision-making loop, are set aside. This results in the people who normally run operations in the USCG on a daily basis, the E6s-O3s, being assigned to support roles and more senior officers being assigned to unfamiliar positions. Although operational success has not been compromised as a result of this practice, it does promote a certain degree of inefficiency when positions are filled based on rank instead of ability.

On the other hand, the idea of using more senior personnel to manage DMDRO is not without some advantages. Probably the most compelling reason to have more senior people assigned to key positions in the ICP is the decision-making *authority* required during DMDRO. With mid to senior level officers a certain degree of accountability is inherent with every decision made. This becomes a factor when the decisions being made have a great impact on the success of the mission and the political fall-out should it fail.

Management Systems – As stated previously, the Incident Command System has been adopted by the USCG for management of contingency operations.¹³ ICS includes four basic sections or staff elements: operations, planning, logistics, and finance/administration. It was used to effectively coordinate efforts of USCG and civilian assets in both of the cases mentioned. In contrast, the USN employed the general staff system, which is common throughout the Department of Defense (DOD) and includes at least six staff elements: (N-1) personnel and administration; (N-2) intelligence; (N-3) operations; (N-4) logistics; (N-5) plans and policy; and (N-6) command, control, communications, and computers (C4). “It took three days [in the

Egypt Air 990 case] to translate the ICS organization into the Navy N-staff organization.”¹⁴ While the ICS system was more effective in the Alaska Airlines 261 case, the operational commander noted that a better “understanding of the N-Staff equivalents of ICS for dealing with DOD” was needed.¹⁵ This incompatibility leads to confusion, inefficiency, and duplication of effort. In her paper, “Operational Command and Control of Federal Domestic Emergency Response Operations,” CDR Sharon Richey, USCG, advocated the establishment of ICS as a national C2 emergency management system.¹⁶ This may be appropriate as a management tool during incidents in which DOD forces do not participate. However, due to the complexity of DOD and the fact that the “staff” system that is currently being used is familiar and effective, it is unlikely that a system such as ICS with its requisite training requirements would be adopted. Some type of ICS/N-Staff interface is probably a more workable solution when DOD is involved in DMDRO.

Another management “systems” approach to addressing the C2 issue in DMDRO is the formation of a coordination group. During the Alaska Airlines 261 response a “Multi-Agency Coordination (MAC) Group” was hosted by the California Office of Emergency Services.¹⁷ Representatives from the various federal, state, and local agencies involved met twice each day and acted as conduits between their respective organizations and the group. This was an effective management tool for information transfer; however, it provided no centralized C2 function. These management systems, ICS, N-Staff, and MAC have a common objective, which is to coordinate forces and keep the momentum of the response headed toward an acceptable conclusion. They also share one key element, which is the ability of involved parties to communicate with one another and see a common picture.

Communications – Command and control in DMDRO is significantly impacted by the ability of the operational commander and supporting players to communicate. This may appear axiomatic; however, due to the expansive operating area normally associated with DMDRO and long lines of operations, the operational commander has a more difficult time maintaining the “big picture.” During Egypt Air 990 the Coast Guard Cutter SPENCER used the Global Command and Control System-Maritime (GCCS-M) to plan and track its on-scene commander duties and send daily updates to the operational commander via Over The Horizon Command Information Exchange System (OTCIXS).¹⁸ The operational commander used this information in planning and tasking other units. With advances in computer technology emergency response agencies have recognized the potential uses of it in emergency management. E-Team Inc., a California company, has developed a web-based system that allows different agencies to basically plug into a response and immediately view the current status. It has been likened to a “great white board in the sky.”¹⁹ While the advantages to C2 of systems such as these are obvious, their availability is not universal even among USCG assets. This leaves voice communication as the default method of conveying pertinent real-time information.

Radio communication between the operational commander and assigned units was complicated in both of the subject cases by variations in equipment and procedures. Initially, in Egypt Air 990, a U.S. Air Force C-130 crew was designated on-scene commander. Due to the crew’s lack of familiarity with maritime search and rescue as well as the aircraft’s communications incompatibility with surface units they were relieved by a USCG HU-25 Falcon aircraft.²⁰ The crew of the USCG aircraft had the necessary training and experience to coordinate rescue efforts and the aircraft, like all USCG aircraft and vessels, had marine band VHF-FM radios, which enabled them to

communicate with surface units. U.S. Coast Guard vessels also add a secure voice capability to VHF-FM facilitating secure unit-to-unit communications. The USN vessels, on the other hand, do not have secure VHF-FM capability limiting its effectiveness in DMDRO.²¹ The shore-based National Distress and Monitoring System maintained by the USCG is also not currently equipped to provide secure VHF-FM communications. Consequently, the operational commander is forced to communicate in "clear-voice." However, clear voice communication is the least preferred method of communicating during DMDRO due to the sensitive nature of the subject matter, i.e. disposition of human remains, condition of evidence, etc. Since VHF-FM is the normal mode of communication among commercial and private vessels and can be monitored by commercially available scanners, other methods are pursued.

High Frequency (HF) radios are also used for secure ship-to-ship communication during DMDRO. During Egypt Air 990, however, this was complicated by the incompatibility of keying material between the USCG and USN vessels. A "work around" was achieved by having keying material transferred from the USN vessels to the USCG vessels via small-boat.²² Further complicating the use of HF is the lack of availability of compatible systems which can be easily transported to the Incident Command Post. While they are available in deployable command trailers, these often do not come with personnel trained to operate the radios.²³

A third area of note is the use of cellular communications by virtually everyone involved in both Egypt Air 990 and Alaska Air 261. While this became an alternative to radio communications with deployed vessels and aircraft, the overwhelming volume quickly saturated the local cellular systems. Cellular providers added portable towers to handle the extra load to overcome this. It also added another dimension in that the

operational commander was forced to track cellular numbers, which often changed as individuals within organizations changed roles or were relieved. The limited range of cellular communications when trying to communicate with vessels at sea and the potential of eavesdropping by people with scanners also complicated their use.

Eavesdropping on communications is a tactic used by some in the media to attempt to "scoop" other reporters. This became apparent in Alaska Airlines 261 when a "pinger" from the flight data recorder was located and it was reported on television prior to the NTSB being notified. Even with the problems noted here, cellular phone use has proven to be a viable communications tool for C2.

The problems identified with the communications factor of DMDRO should not be overlooked as many of them are continually repeated. Given the proper priority and supported by appropriate doctrine they could be corrected thus alleviating one obstacle to mission success. Identification of communications resources and planning for their employment by operational commanders would alleviate major problems and enhance the C2 function during DMDROs. As noted by the operational commander of Egypt Air 990, "Interoperability between agencies and services remains an issue to be resolved."²⁴

Location – Proximity to naval bases has made it convenient to use them as staging sites in several DMDROs. The aforementioned problems notwithstanding, this actually facilitated C2 for the operational commander. Quick responses by both Naval Station Newport and Naval Construction Battalion Center Port Hueneme allowed the operational commanders to work from a secure facility where access and logistics could be managed with a high degree of reliability.²⁵ A major question to be answered for the operational commander is where the Incident Command Post would be established if the DMDRO were to occur some distance from a military base or even a port facility. Had any of the

planes mentioned in this paper stayed airborne for another 15 minutes or so the response to the cases would have been much more difficult to manage. Moving the location of the crash further out to sea or to a point along the coast that is less populated or accessible would greatly extend the lines of communications from the operational commander to the units on scene thus complicating logistics, jurisdiction, deployment time, site of the Incident Command Post, etc. This fact is not lost on the industry executives that have a stake in DMDRO. At a symposium held at the National Ocean Industries Association's 2000 Fall Meeting, participants, which included USCG personnel and oil industry representatives, location of the UCP [Unified or Incident Command Post] was determined to be "extremely important." According to this group "locations should be pre-determined, taking into account the proximity to the incident, access to resources in the area, and access to a pool of experienced response experts."²⁶ It would be time-consuming if not impossible to plan to a level of detail that coordinated the location of every possible contingency with a corresponding UCP. However, since each USCG operational commander is responsible for a defined geographic area, it would be prudent to plan for possible contingencies and identify potential sites for an ICP or UCP.

Stages – The fact that there are predictable if not distinct stages to every DMDRO should work to the advantage of the operational commander. Gaining an understanding of these stages, what the objective is in each one, and which agency has responsibility for achieving that objective will go far in ameliorating C2. In nearly every imaginable instance the USCG will be the lead agency at the beginning of DMDRO since the search for survivors will take precedence over other concerns. Ideally, when the DMDRO shifts into a salvage and evidence recovery phase, the operational commander should shift to the NTSB or senior USN representative as appropriate.

This did not occur in the Egypt Air 990 case as USCG personnel were asked to remain in a C2 role during the transition from search and rescue to salvage and recovery due to their familiarity with the situation and ability to supply personnel and resources.²⁷ In the Alaska Airlines 261 Lessons Learned summary the operational commander stated that, "While NTSB became the lead agency for the search and recovery phase, it focused primarily on the investigation aspects of operations [and]...the Coast Guard's role shifted to one of vessel traffic management, memorial service support, and safety and security zone enforcement."²⁸ These experiences suggest the lead agency may be the NTSB or FBI once the investigation phase has begun, but neither have personnel with the necessary experience to assume C2 in a maritime environment. In effect the USCG operational commander must shift from performing his C2 role with responsibility for both defining and achieving the objective to one in which the objective is defined by another agency and he is responsible only for achieving it.

These six factors, organizational culture, rank structure, systems, communications, locations, and stages offer one of several possible frameworks for analyzing C2 in DMDRO. Further, they provide a point of departure for a fuller examination of the subject to assist DMDRO participants in improving interoperability. They are not intended to be all-inclusive since there are a myriad of possible combinations of factors inherent in any disaster response.

Counter-arguments

Several possible counter-arguments could be offered to the notion that there is even a problem with C2 in DMDRO. Theoretically, these might include: (a) the problem of C2 in DMDRO is too insignificant to be concerned about; (b) due to the multi-

jurisdictional nature of DMDRO, it is too complex to try to resolve; or, (c) a federally mandated emergency management system will prevent C2 problems from occurring.

The first of these theoretical counter-arguments, C2 is too insignificant to be concerned about, should raise red flags with the operational commander. Since C2 is the nucleus of an operation, the "tie that binds" if you will, it is the single most important operational function. The "too insignificant" argument may also include elements such as the units and agencies involved will self-synchronize and somehow know automatically what objective they are striving to attain. Undoubtedly, the people who serve in the USCG, USN, NTSB, and emergency response agencies are very capable and can often discern the objective inherent in a given situation. However, when working in unfamiliar territory with unfamiliar players, even the best responders need guidance and coordination. Given the enormous complexity of DMDRO such as that discussed in this paper, C2 rises to the top as being vital to mission success. Another factor to add to this equation is that not all DMDRO will involve catastrophic plane crashes. In a situation such as a successful ditching at sea or a foundering cruise ship the operational commander will require a solid C2 function to ensure the best hope of rescuing survivors.

The second counter-argument, DMDRO is too complex due to its multi-jurisdictional nature, has been addressed to some degree by the Federal Memorandum of Understanding (MOU) developed following the TWA 800 crash. This was noted by the Alaska Airlines 261 operational commander who stated, "There were no "turf battles" between the various agencies as to who was in charge or who had jurisdiction over what...It is clear the MOU's placed into effect after TWA 800...are working."²⁹ Support for this counter-argument lies in the fact that DMDRO could occur virtually anywhere and therefore the combination of potential agencies that could be involved is limitless.

This argument is not without merit. However, this author believes the USCG's nationwide system of Groups and Marine Safety Offices lays the groundwork for flexible contingency planning, which should frame any response thereby reducing this "limitless" potential to a manageable size. Additionally, the recent creation of Joint Task Force – Civil Support (JTF-CS) under Commander in Chief (CINC), Joint Forces Command, establishes an active duty DOD CINC with domestic emergency response authority.³⁰ Although this is currently limited to consequence management during a WMD attack, the role of JTF-CS could be expanded to include responsibility for coordination during DMDRO.

The third counter-argument that could be offered is that a federally mandated emergency management system would prevent C2 problems from occurring. Having a common system of management such as ICS would facilitate the integration of each agency into the response organization as the situation evolved. As previously mentioned, however, this author believes this limits the purview of C2 to a management system and fails to account for many other factors affecting C2 in DMDRO.

Conclusions

Effective command and control in DMDRO relies upon the notion that each agency involved is working toward a common objective. The multi-stage nature of such events, however, implies that each stage has its own intermediate objective for which a particular agency is responsible. It is this change in responsibility and the accompanying change in jurisdiction that often complicates DMDRO. This concept that is normal in DMDRO or any other civil emergency is counter to the traditional military approach in which a single operational commander has overall responsibility for the attainment of the objective and, therefore, maintains his dominant C2 position throughout the operation.

Joint Pub 3-07, Joint Doctrine for Military Operations Other Than War (MOOTW), states, "No single C2 option works best for all MOOTW. JFCs and their subordinates should be flexible in modifying standard arrangements to meet specific requirements of each situation and promote unity of effort."³¹ This flexibility tempered with contingency planning is the key to successful DMDRO. Domestic Maritime Disaster Response Operations are complex by their very nature. The operational commander who plans for and develops an understanding of the various factors affecting command and control in such operations will be more likely to achieve mission success.

Recommendations

Based on the analysis presented in this paper there are seven areas for improvement. First, more USCG Groups/Districts/Area Operations Staffs should be trained in ICS procedures. Since the vast majority of emergency response agencies are effectively using it nationwide all branches of the USCG will be expected to be familiar with its procedures. It may not be a perfect fit for DMDRO, but it works and it is better than the ad hoc arrangement that arises in a major disaster.

Second, an ICS to N-Staff interface should be developed that allows both civilian and military personnel to quickly identify their counterparts and what they can expect from or what they need to provide to that person when a shift in lead agency occurs.

Third, technology should be implemented to enable all units involved in DMDRO to communicate in a secure mode with the operational commander and provide real-time updates. Since all USN vessels and most larger USCG cutters are equipped with secure satellite communications, the solution may be to provide this capability to all vessels participating in DMDRO.

Fourth, all USCG Group commands should identify potential sites for an Incident Command Post within their area of responsibility. This could include military bases, police or fire department headquarters, harbor patrol offices, port authority buildings, etc. Particular attention should be paid to the ability of a facility to support maritime operations.³²

Fifth, through exercises and/or informal meetings operational commanders should identify potential players in a DMDRO, what their capabilities are, how their chain of command functions, etc. The relationships established with local and regional organizations in the regional CG Commander's "most likely" threat scenarios are reasonably going to be the same players that will emerge in the larger event.³³ (Note: Since USCG Groups tend to cover broad geographic areas, these factors could change depending on the location of an incident within the area of responsibility so attention should be paid to how the various agencies interact as the venue shifts.)

Sixth, the JFCOM CINC should, through JTF-CS, develop contingency plans for DMDRO addressing the concerns and proposals listed throughout this paper. The USCG should be included as a major, if not the lead, player in all planning related to DMDRO.

Seventh, the Egypt Air 990 operational commander's recommendation of a joint USCG/USN lessons learned for all DMDRO should be implemented. NWDC should be tasked with publication of Joint Tactics, Techniques, and Procedures (JTTP) for DMDRO.³⁴

Follow-On Considerations

This paper focused on the issue of command and control in maritime disaster response. In the course of this author's research several tangential issues were discovered. As the term "homeland defense" has become a popular phrase of late due to

the threat to our national sovereignty from drug smugglers, illegal immigrants, terrorists, etc., there is a definite link between the response to these threats and the response to maritime disasters. This link is established because nearly all the agencies, with the possible exception of NTSB, that have responsibility for countering these threats are also the same agencies that will respond to a maritime disaster. Consequently, it would be prudent to combine planning and preparation efforts and avoid the duplication of effort and loss of connectivity that would result from the establishment of a narrowly focused response organization.

Due to its role as the lead agency for domestic counter-terrorism, the FBI established the National Domestic Preparedness Office (NDPO), which serve as a coordinating body for preparedness programs. While its main focus is crisis and consequence management surrounding weapons of mass destruction, its very name and makeup implies that it could serve broader interests.³⁵ There is also discussion about forming a new cabinet level agency focused on homeland defense. Combining the resources, personnel, and planning efforts that will inevitably flow out of these discussions with the current efforts underway at NDPO would appear to make good fiscal and practical sense. This is a good opportunity for the federal government to demonstrate that it is capable of using its vast resources to address a broad issue and avoid the piecemeal approach that has so often resulted in multiple federal agencies with overlapping jurisdiction and responsibility. There is benefit in having one agency exercise oversight in all federal disaster response operations whether they occur in the maritime environment or over land.

Notes

¹Public Law, U.S. Code, Title 42, sec. 5121 (1988).

²James F. Miskel, "Observations on the Role of the Military in Disaster Relief," Naval War College Review, (Winter 1996): 109.

³Scott R. Taylor, Amy M. Rowe, Brian M. Lewis, "Consequence Management – In Need of a Timeout," Joint Forces Quarterly, (Summer 1999): 81.

⁴Commander, First Coast Guard District (opr), "Navy Chaplains Assigned to the Coast Guard," Egypt Air Flight 990 Lessons Learned, Lessons Learned No. 20001206005, 25 January 2000, CGSAILS Database, <<http://lintra.comdt.uscg.mil/retrievereports/ShowReport.asp?tnum=20001206093036>> [21 December 2000].

⁵"Egypt Air Flight 990 Disaster," Egypt Air Flight 990 Lessons Learned.*

⁶Ibid.

⁷Some of the USN salvage personnel worked on both cases. Their knowledge and experience assisted the operational commander during the transition from search and rescue to salvage and recovery.

⁸The senior USCG person responding to a typical search and rescue case is an E-4 or E-5 who serves as the boat coxswain. The coxswain is in radio contact with an E-5 or an E-6 who then communicates through an O-3 or O-4 to the operational commander who is usually an O-6.

⁹"Command and Control," Egypt Air Flight 990 Lessons Learned.*

¹⁰Alan L. Brown, "Jointness Begins at Home—Responding to Domestic Incidents," Joint Forces Quarterly, (Spring 1999): 106.

¹¹QMCS David Wentworth, Senior Controller USCG Group Woods Hole Massachusetts, interview by author, 21 December 2000, Woods Hole, MA.

¹²"Military Rank Structure in ICS Structure," Egypt Air Flight 990 Lessons Learned.*

¹³Sharon K. Richey, "Operational Command and Control of Federal Domestic Emergency Response Operations," (Unpublished Research Paper, U. S. Naval War College, Newport, RI: 2000), 12.

¹⁴"Egypt Air Flight 990 Disaster," Egypt Air Flight 990 Lessons Learned.*

¹⁵Commanding Officer, Coast Guard MSO/Group Los Angeles-Long Beach, "Alaska Airlines Flight 261 Crash After-Action Report," 28 February 2000, 2.

¹⁶Richey, 24.

¹⁷Commanding Officer, Coast Guard MSO/Group Los Angeles-Long Beach, 2.

¹⁸"Egypt Air Flight 990 GCCS-M Use," Egypt Air Flight 990 Lessons Learned.*

¹⁹Karen Kaplan, "Canoga Park Firm Will Manage Web-Based Information System for Crisis Control at 2002 Winter Games," Los Angeles Times, 11 December 2000, Lexis-Nexis, Los Angeles, CA: Lexis-Nexis, (6 January 2001).

²⁰"USAF as On Scene Commander," Egypt Air Flight 990 Lessons Learned.*

²¹"Coast Guard – Navy Communications," Egypt Air Flight 990 Lessons Learned.*

²²Ibid.

²³"Providing Personnel in Addition to Hardware," Egypt Air Flight 990 Lessons Learned.*

²⁴"Egypt Air Flight 990 Disaster," Egypt Air Flight 990 Lessons Learned.*

²⁵"Egypt Air Flight 990 Disaster," Egypt Air Flight 990 Lessons Learned.* and Commanding Officer, Coast Guard MSO/Group Los Angeles-Long Beach, 6.

²⁶NOIA Public Affairs Staff, "Strategizing for the Unanticipated," Offshore, December 2000, Lexis-Nexis, Washington, D.C.: PennWell Publishing Co., (6 January 2001).

²⁷"Egypt Air Flight 990 Disaster," Egypt Air Flight 990 Lessons Learned.*

²⁸Commanding Officer, Coast Guard MSO/Group Los Angeles-Long Beach, 1.

²⁹Commanding Officer, Coast Guard MSO/Group Los Angeles-Long Beach, 5.

³⁰Commander, Joint Forces Command, "Our Mission," Joint Task Force Civil Support, <<http://www.jfcom.mil/jtfc/main.html>> (26 January 2001).

³¹U.S. Joint Chiefs of Staff, Joint Doctrine for Military Operations Other Than War (Joint Pub 3-07), Washington, D.C.: 16 June 1997.

³²Commanding Officer, Coast Guard MSO/Group Los Angeles-Long Beach, 6.

³³"ICSs, MSO, OPS & Agencies partnership in ICS," Egypt Air Flight 990 Lessons Learned.*

³⁴“OSC Access to Lessons Learned,” Egypt Air Flight 990 Lessons Learned. *

³⁵Dale Watson, “Statement,” U.S. Congress, House, Subcommittee on Oversight, Investigation, and Emergency Management, The FBI’s Role in Support of Domestic Preparedness, Committee on Transportation and Infrastructure, 4 May 2000.

*Note: Remainder of cite is same for all Egypt Air 990 Lessons Learned.

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DOCUMENT 4

CONPLAN – United States Government Interagency Domestic Terrorism Concept of Operations Plan

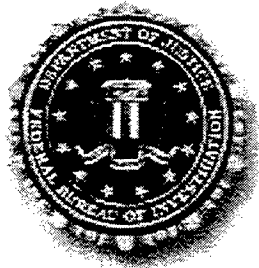
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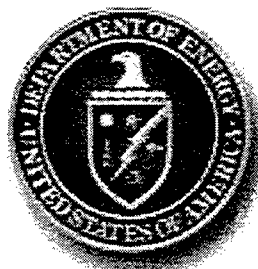
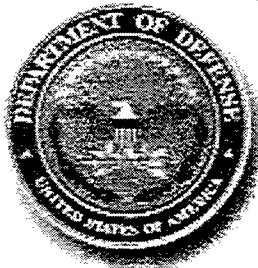
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CONPLAN

United States Government
Interagency Domestic Terrorism
Concept of Operations Plan



January 2001

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The United States Government Interagency Domestic Terrorism Concept of Operations Plan, hereafter referred to as the CONPLAN, is designed to provide overall guidance to Federal, State and local agencies concerning how the Federal government would respond to a potential or actual terrorist threat or incident that occurs in the United States, particularly one involving WMD.

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UNITED STATES GOVERNMENT

INTERAGENCY DOMESTIC TERRORISM

CONCEPT OF OPERATIONS PLAN

TABLE OF CONTENTS

	<u>Page Number</u>
Table of Contents	i
Foreword	iii
Letter of Agreement	iv
Signatories to the Plan	vi
List of Figures	
Figure 1: Incident Command System / Unified Command	17
Figure 2: FBI Command Post	19
Figure 3: Coordinating Relationships	21
Figure 4: Joint Operations Center	23
Figure 5: On-Scene Coordination	26
 I. Introduction and Background	 1
A. Introduction	1
B. Purpose	2
C. Scope	2
D. Primary Federal Agencies	3
E. Primary Agency Responsibilities	3
1. Department of Justice (DOJ)/ Federal Bureau of Investigation (FBI)	3
2. Federal Emergency Management Agency (FEMA)	4
3. Department of Defense (DOD)	4
4. Department of Energy (DOE)	4
5. Environmental Protection Agency (EPA)	5
6. Department of Health and Human Services (HHS)	5
 II. Policies	 6
A. Authorities	6
B. Other Plans and Directives	6
C. Federal Agency Authorities	6
D. Federal Response to a Terrorism Incident	7
1. Crisis Management	7
2. Consequence Management	7
E. Lead Federal Agency Designation	8
F. Requests For Federal Assistance	8
G. Funding	9
H. Deployment/Employment Priorities	9

I.	Planning Assumptions and Considerations	9
J.	Training and Exercises	11
III.	Situation	11
A.	Introduction	11
B.	Differences between WMD Incidents and Other Incidents	11
C.	Threat Levels	12
1.	Level #4 - Minimal Threat	13
2.	Level #3 - Potential Threat	13
3.	Level #2 - Credible Threat	13
4.	Level #1 - WMD Incident	13
D.	Lead Federal Agency Responsibilities	14
IV.	Concept of Operations	15
A.	Mission	15
B.	Command and Control	15
1.	Consequence Management	15
2.	Crisis Management	18
C.	Unification of Federal, State and Local Response	20
1.	Introduction	20
2.	National Level Coordination	20
3.	Field Level Coordination	22
4.	On-Scene Coordination	24
V.	Phasing of the Federal Response	27
A.	Notification	27
1.	The Role of the FBI	27
2.	The Role of FEMA	28
B.	Activation and Deployment	28
1.	The Role of the FBI	29
2.	The Role of FEMA	29
C.	Response Operations	30
D.	Response Deactivation	30
E.	Recovery	30
Appendix A	Acronyms	A-1
Appendix B	Definitions	B-1

FOREWORD

Publication of the United States Government Interagency Domestic Terrorism Concept of Operations Plan (CONPLAN) represents a concerted effort by a number of Federal departments and agencies to work together to achieve a common goal. The CONPLAN was developed through the efforts of six primary departments and agencies with responsibilities as identified in Presidential Decision Directive/NSC-39 (PDD-39). This plan has been developed consistent with relevant PDDs, Federal law, the Attorney General's Critical Incident Response Plan, the PDD-39 Domestic Guidelines, and the Federal Response Plan and its Terrorism Incident Annex. The FBI has worked with these departments and agencies to provide a forum to participate in planning and exercise activities in order to develop, maintain, and enhance the Federal response capability.

To ensure the policy in PDD-39 and PDD-62 is implemented in a coordinated manner, the CONPLAN is designed to provide overall guidance to Federal, State and local agencies concerning how the Federal government would respond to a potential or actual terrorist threat or incident that occurs in the United States, particularly one involving Weapons of Mass Destruction (WMD). The CONPLAN outlines an organized and unified capability for a timely, coordinated response by Federal agencies to a terrorist threat or act. It establishes conceptual guidance for assessing and monitoring a developing threat, notifying appropriate Federal, State, and local agencies of the nature of the threat, and deploying the requisite advisory and technical resources to assist the Lead Federal Agency (LFA) in facilitating interdepartmental coordination of crisis and consequence management activities.

Actions will continue to refine and identify the mission, capabilities, and resources of other supporting departments and agencies; and the actions each agency or department must perform during each phase of the response, to include crisis management and consequence management actions that are necessary for chemical, biological, nuclear/radiological, and conventional materials or devices.

Inquiries concerning this CONPLAN should be addressed to the appropriate Lead Agency under this plan:

- Federal Bureau of Investigation, Counterterrorism Division, Domestic Terrorism/Counterterrorism Planning Section, for Crisis Management, or
- Federal Emergency Management Agency, Response and Recovery Directorate, Operations and Planning Division, for Consequence Management.

LETTER OF AGREEMENT

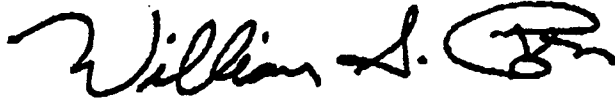
The United States Government Interagency Domestic Terrorism Concept of Operations Plan, hereafter referred to as the CONPLAN, is designed to provide overall guidance to Federal, State and local agencies concerning how the Federal government would respond to a potential or actual terrorist threat or incident that occurs in the United States, particularly one involving WMD.

The following departments and agencies agree to support the overall concept of operations of the CONPLAN in order to carry out their assigned responsibilities under PDD-39 and PDD-62. The departments and agencies also agree to implement national and regional planning efforts and exercise activities in order to maintain the overall Federal response capability. Specifically:

- The Attorney General is responsible for ensuring the development and implementation of policies directed at preventing terrorist attacks domestically, and will undertake the criminal prosecution of these acts of terrorism that violate U.S. law. The Department of Justice has charged the Federal Bureau of Investigation with execution of its LFA responsibilities for the management of a Federal response to terrorist incidents. As the lead agency for crisis management, the FBI will implement a Federal crisis management response. As LFA, the FBI will designate a Federal on-scene commander (OSC) to ensure appropriate coordination of the overall United States Government response with Federal, State and local authorities until such time as the Attorney General transfers the LFA role to the Federal Emergency Management Agency (FEMA).
- As the lead agency for consequence management, FEMA will implement the Federal Response Plan (FRP) to manage and coordinate the Federal consequence management response in support of State and local authorities.
- The Department of Defense will provide military assistance to the LFA and/or the CONPLAN primary agencies during all aspects of a terrorist incident upon request by the appropriate authority and approval by the Secretary of Defense.
- The Department of Energy will provide scientific-technical personnel and equipment in support of the LFA during all aspects of a nuclear/radiological WMD terrorist incident.
- The Environmental Protection Agency will provide technical personnel and supporting equipment to the LFA during all aspects of a WMD terrorist incident.

- The Department of Health and Human Services is the primary agency to plan and to prepare for a national response to medical emergencies arising from the terrorist use of WMD. HHS provides technical personnel and supporting equipment to the LFA during all aspects of a terrorist incident.

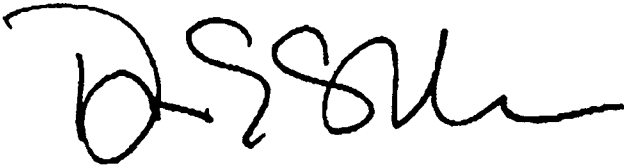
SIGNATORIES TO THE UNITED STATES GOVERNMENT INTERAGENCY
DOMESTIC TERRORISM CONCEPT OF OPERATIONS PLAN



Secretary
Department of Defense



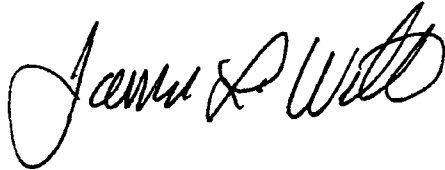
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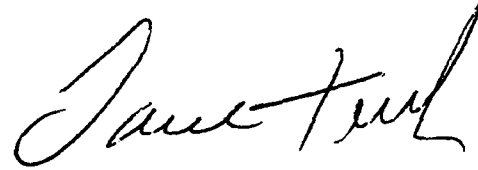
Secretary
Department of Health and Human Services



Administrator
Environmental Protection Agency



Director
Federal Emergency Management Agency



Director
Federal Bureau of Investigation



Attorney General
Department of Justice

I. INTRODUCTION AND BACKGROUND

A. Introduction

The ability of the United States Government to prevent, deter, defeat and respond decisively to terrorist attacks against our citizens, whether these attacks occur domestically, in international waters or airspace, or on foreign soil, is one of the most challenging priorities facing our nation today. The United States regards all such terrorism as a potential threat to national security, as well as a violent criminal act, and will apply all appropriate means to combat this danger. In doing so, the United States vigorously pursues efforts to deter and preempt these crimes and to apprehend and prosecute directly, or assist other governments in prosecuting, individuals who perpetrate or plan such terrorist attacks.

In 1995, President Clinton signed Presidential Decision Directive 39 (PDD-39), the United States Policy on Counterterrorism. This Presidential Directive built upon previous directives for combating terrorism and further elaborated a strategy and an interagency coordination mechanism and management structure to be undertaken by the Federal government to combat both domestic and international terrorism in all its forms. This authority includes implementing measures to reduce our vulnerabilities, deterring terrorism through a clear public position, responding rapidly and effectively to threats or actual terrorist acts, and giving the highest priority to developing sufficient capabilities to combat and manage the consequences of terrorist incidents involving weapons of mass destruction (WMD).

To ensure this policy is implemented in a coordinated manner, the Concept of Operations Plan, hereafter referred to as the CONPLAN, is designed to provide overall guidance to Federal, State and local agencies concerning how the Federal government would respond to a potential or actual terrorist threat or incident that occurs in the United States, particularly one involving WMD. The CONPLAN outlines an organized and unified capability for a timely, coordinated response by Federal agencies to a terrorist threat or act. It establishes conceptual guidance for assessing and monitoring a developing threat, notifying appropriate Federal, State, and local agencies of the nature of the threat, and deploying the requisite advisory and technical resources to assist the Lead Federal Agency (LFA) in facilitating interagency/interdepartmental coordination of a crisis and consequence management response. Lastly, it defines the relationships between structures under which the Federal government will marshal crisis and consequence management resources to respond to a threatened or actual terrorist incident.

B. Purpose

The purpose of this plan is to facilitate an effective Federal response to all threats or acts of terrorism within the United States that are determined to be of sufficient magnitude to warrant implementation of this plan and the associated policy guidelines established in PDD-39 and PDD-62. To accomplish this, the CONPLAN:

- Establishes a structure for a systematic, coordinated and effective national response to threats or acts of terrorism in the United States;
- Defines procedures for the use of Federal resources to augment and support local and State governments; and
- Encompasses both crisis and consequence management responsibilities, and articulates the coordination relationships between these missions.

C. Scope

The CONPLAN is a strategic document that:

- Applies to all threats or acts of terrorism within the United States;
- Provides planning guidance and outlines operational concepts for the Federal crisis and consequence management response to a threatened or actual terrorist incident within the United States;
- Serves as the foundation for further development of detailed national, regional, State, and local operations plans and procedures;
- Includes guidelines for notification, coordination and leadership of response activities, supporting operations, and coordination of emergency public information across all levels of government;
- Acknowledges the unique nature of each incident, the capabilities of the local jurisdiction, and the activities necessary to prevent or mitigate a specific threat or incident; and
- Illustrates ways in which Federal, State and local agencies can most effectively unify and synchronize their response actions.

D. Primary Federal Agencies

The response to a terrorist threat or incident within the U.S. will entail a highly coordinated, multi-agency local, State, and Federal response. In support of this mission, the following primary Federal agencies will provide the core Federal response:

- Department of Justice (DOJ) / Federal Bureau of Investigation (FBI) *
- Federal Emergency Management Agency (FEMA) **
- Department of Defense (DOD)
- Department of Energy (DOE)
- Environmental Protection Agency (EPA)
- Department of Health and Human Services (DHHS)

* Lead Agency for Crisis Management

** Lead Agency for Consequence Management

Although not formally designated under the CONPLAN, other Federal departments and agencies may have authorities, resources, capabilities, or expertise required to support response operations. Agencies may be requested to participate in Federal planning and response operations, and may be asked to designate staff to function as liaison officers and provide other support to the LFA.

E. Primary Agency Responsibilities

1. Department of Justice (DOJ)/ Federal Bureau of Investigation (FBI)

The Attorney General is responsible for ensuring the development and implementation of policies directed at preventing terrorist attacks domestically, and will undertake the criminal prosecution of these acts of terrorism that violate U.S. law. DOJ has charged the FBI with execution of its LFA responsibilities for the management of a Federal response to terrorist threats or incidents that take place within U.S. territory or those occurring in international waters that do not involve the flag vessel of a foreign country. As the lead agency for crisis management, the FBI will implement a Federal crisis management response. As LFA, the FBI will designate a Federal on-scene commander to ensure appropriate coordination of the overall United States Government response with Federal, State and local authorities until such time as the Attorney General transfers the overall LFA role to FEMA. The FBI, with appropriate approval, will form and coordinate the deployment of a Domestic Emergency Support Team (DEST) with other agencies, when appropriate, and seek appropriate Federal support based on the nature of the situation.

2. Federal Emergency Management Agency (FEMA)

As the lead agency for consequence management, FEMA will manage and coordinate any Federal consequence management response in support of State and local governments in accordance with its statutory authorities. Additionally, FEMA will designate appropriate liaison and advisory personnel for the FBI's Strategic Information and Operations Center (SIOC) and deployment with the DEST, the Joint Operations Center (JOC), and the Joint Information Center (JIC).

3. Department of Defense (DOD)

DOD serves as a support agency to the FBI for crisis management functions, including technical operations, and a support agency to FEMA for consequence management. In accordance with DOD Directives 3025.15 and 2000.12 and the Chairman Joint Chiefs of Staff CONPLAN 0300-97, and upon approval by the Secretary of Defense, DOD will provide assistance to the LFA and/or the CONPLAN primary agencies, as appropriate, during all aspects of a terrorist incident, including both crisis and consequence management. DOD assistance includes threat assessment; DEST participation and transportation; technical advice; operational support; tactical support; support for civil disturbances; custody, transportation and disposal of a WMD device; and other capabilities including mitigation of the consequences of a release.

DOD has many unique capabilities for dealing with a WMD and combating terrorism, such as the US Army Medical Research Institute for Infectious Diseases, Technical Escort Unit, and US Marine Corps Chemical Biological Incident Response Force. These and other DOD assets may be used in responding to a terrorist incident if requested by the LFA and approved by the Secretary of Defense.

4. Department of Energy (DOE)

DOE serves as a support agency to the FBI for technical operations and a support agency to FEMA for consequence management. DOE provides scientific-technical personnel and equipment in support of the LFA during all aspects of a nuclear/radiological WMD terrorist incident. DOE assistance can support both crisis and consequence management activities with capabilities such as threat assessment, DEST deployment, LFA advisory requirements, technical advice, forecasted modeling predictions, and operational support to include direct support of tactical operations. Deployable DOE scientific technical assistance and support includes capabilities such as search operations; access operations; diagnostic and device assessment; radiological assessment and monitoring;

identification of material; development of Federal protective action recommendations; provision of information on the radiological response; render safe operations; hazards assessment; containment, relocation and storage of special nuclear material evidence; post-incident clean-up; and on-site management and radiological assessment to the public, the White House, and members of Congress and foreign governments. All DOE support to a Federal response will be coordinated through a Senior Energy Official.

5. Environmental Protection Agency (EPA)

EPA serves as a support agency to the FBI for technical operations and a support agency to FEMA for consequence management. EPA provides technical personnel and supporting equipment to the LFA during all aspects of a WMD terrorist incident. EPA assistance may include threat assessment, DEST and regional emergency response team deployment, LFA advisory requirements, technical advice and operational support for chemical, biological, and radiological releases. EPA assistance and advice includes threat assessment, consultation, agent identification, hazard detection and reduction, environmental monitoring; sample and forensic evidence collection/analysis; identification of contaminants; feasibility assessment and clean-up; and on-site safety, protection, prevention, decontamination, and restoration activities. EPA and the United States Coast Guard (USCG) share responsibilities for response to oil discharges into navigable waters and releases of hazardous substances, pollutants, and contaminants into the environment under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). EPA provides the predesignated Federal On-Scene Coordinator for inland areas and the USCG for coastal areas to coordinate containment, removal, and disposal efforts and resources during an oil, hazardous substance, or WMD incident.

6. Department of Health and Human Services (HHS)

HHS serves as a support agency to the FBI for technical operations and a support agency to FEMA for consequence management. HHS provides technical personnel and supporting equipment to the LFA during all aspects of a terrorist incident. HHS can also provide regulatory follow-up when an incident involves a product regulated by the Food and Drug Administration. HHS assistance supports threat assessment, DEST deployment, epidemiological investigation, LFA advisory requirements, and technical advice. Technical assistance to the FBI may include identification of agents, sample collection and analysis, on-site safety and protection activities, and medical management planning. Operational support to FEMA may include mass immunization, mass prophylaxis,

mass fatality management, pharmaceutical support operations (National Pharmaceutical Stockpile), contingency medical records, patient tracking, and patient evacuation and definitive medical care provided through the National Disaster Medical System.

II. POLICIES

A. Authorities

The following authorities are the basis for the development of the CONPLAN:

- Presidential Decision Directive 39, including the Domestic Guidelines
- Presidential Decision Directive 62
- Robert T. Stafford Disaster Relief and Emergency Assistance Act

B. Other Plans and Directives

- Federal Response Plan, including the Terrorism Incident Annex
- Federal Radiological Emergency Response Plan
- National Oil and Hazardous Substances Pollution Contingency Plan
- HHS Health and Medical Services Support Plan for the Federal Response to Assets of Chemical/Biological Terrorism
- Chairman of the Joint Chiefs of Staff CONPLAN 0300/0400
- DODD 3025.15 Military Assistance to Civil Authorities
- Other Department of Defense Directives

C. Federal Agency Authorities

The CONPLAN does not supersede existing plans or authorities that were developed for response to incidents under department and agency statutory authorities. Rather, it is intended to be a coordinating plan between crisis and consequence management to provide an effective Federal response to terrorism. The CONPLAN is a Federal signatory plan among the six principal departments and agencies named in PDD-39. It may be updated and amended, as necessary, by consensus among these agencies.

D. Federal Response to a Terrorism Incident

The Federal response to a terrorist threat or incident provides a tailored, time-phased deployment of specialized Federal assets. The response is executed under two broad responsibilities:

1. Crisis Management

Crisis management is predominantly a law enforcement function and includes measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or act of terrorism. In a terrorist incident, a crisis management response may include traditional law enforcement missions, such as intelligence, surveillance, tactical operations, negotiations, forensics, and investigations, as well as technical support missions, such as agent identification, search, render safe procedures, transfer and disposal, and limited decontamination. In addition to the traditional law enforcement missions, crisis management also includes assurance of public health and safety.

The laws of the United States assign primary authority to the Federal government to prevent and respond to acts of terrorism or potential acts of terrorism. Based on the situation, a Federal crisis management response may be supported by technical operations, and by consequence management activities, which should operate concurrently.

2. Consequence Management

Consequence management is predominantly an emergency management function and includes measures to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of terrorism. In an actual or potential terrorist incident, a consequence management response will be managed by FEMA using structures and resources of the Federal Response Plan (FRP). These efforts will include support missions as described in other Federal operations plans, such as predictive modeling, protective action recommendations, and mass decontamination.

The laws of the United States assign primary authority to the State and local governments to respond to the consequences of terrorism; the Federal government provides assistance, as required.

E. Lead Federal Agency Designation

As mandated by the authorities referenced above, the operational response to a terrorist threat will employ a coordinated, interagency process organized through a LFA concept. PDD-39 reaffirms and elaborates on the U.S. Government's policy on counterterrorism and expands the roles, responsibilities and management structure for combating terrorism. LFA responsibility is assigned to the Department of Justice, and is delegated to the FBI, for threats or acts of terrorism that take place in the United States or in international waters that do not involve the flag vessel of a foreign country. Within this role, the FBI Federal on-scene commander (OSC) will function as the on-scene manager for the U.S. Government. All Federal agencies and departments, as needed, will support the Federal OSC. Threats or acts of terrorism that take place outside of the United States or its trust territories, or in international waters and involve the flag vessel of a foreign country are outside the scope of the CONPLAN.

In addition, these authorities reaffirm that FEMA is the lead agency for consequence management within U.S. territory. FEMA retains authority and responsibility to act as the lead agency for consequence management throughout the Federal response. FEMA will use the FRP structure to coordinate all Federal assistance to State and local governments for consequence management. To ensure that there is one overall LFA, PDD-39 directs FEMA to support the Department of Justice (as delegated to the FBI) until the Attorney General transfers the LFA role to FEMA. At such time, the responsibility to function as the on-scene manager for the U.S. Government transfers from the FBI Federal OSC to the Federal Coordinating Officer (FCO).

F. Requests For Federal Assistance

Requests for Federal assistance by State and local governments, as well as those from owners and operators of critical infrastructure facilities, are coordinated with the lead agency (crisis or consequence) responsible under U.S. law for that function. In response to a terrorist threat or incident, multiple or competing requests will be managed based on priorities and objectives established by the JOC Command Group.

State and local governments will submit requests for Federal crisis management assistance through the FBI. State and local governments will submit requests for Federal consequence management assistance through standard channels under the Federal Response Plan. FEMA liaisons assigned to the DEST or JOC coordinate requests with the LFA to ensure consequence management plans and actions are consistent with overall priorities. All other requests for consequence management assistance submitted outside normal channels to the DEST or JOC will be forwarded to the Regional Operations Center (ROC) Director or the Federal Coordinating Officer (FCO) for action.

G. Funding

As mandated by PDD-39, Federal agencies directed to participate in counterterrorist operations or the resolution of terrorist incidents bear the costs of their own participation, unless otherwise directed by the President. This responsibility is subject to specific statutory authorization to provide support without reimbursement. In the absence of such specific authority, the Economy Act applies, and reimbursement cannot be waived.

H. Deployment/Employment Priorities

The multi-agency JOC Command Group, managed by the Federal OSC, ensures that conflicts are resolved, overall incident objectives are established, and strategies are selected for the use of critical resources. These strategies will be based on the following priorities:

1. Preserving life or minimizing risk to health. This constitutes the first priority of operations.
2. Preventing a threatened act from being carried out or an existing terrorist act from being expanded or aggravated.
3. Locating, accessing, rendering safe, controlling, containing, recovering, and disposing of a WMD that has not yet functioned.
4. Rescuing, decontaminating, transporting and treating victims. Preventing secondary casualties as a result of contamination or collateral threats.
5. Releasing emergency public information that ensures adequate and accurate communications with the public from all involved response agencies.
6. Restoring essential services and mitigating suffering.
7. Apprehending and successfully prosecuting perpetrators.
8. Conducting site restoration.

I. Planning Assumptions and Considerations

1. The CONPLAN assumes that no single private or government agency at the local, State, or Federal level possesses the authority and the expertise to act unilaterally on the difficult issues that may arise in

response to threats or acts of terrorism, particularly if nuclear, radiological, biological, or chemical materials are involved.

2. The CONPLAN is based on the premise that a terrorist incident may occur at any time of day with little or no warning, may involve single or multiple geographic areas, and result in mass casualties.

3. The CONPLAN also assumes an act of terrorism, particularly an act directed against a large population center within the United States involving nuclear, radiological, biological, or chemical materials, will have major consequences that can overwhelm the capabilities of many local and State governments to respond and may seriously challenge existing Federal response capabilities, as well.

4. Federal participating agencies may need to respond on short notice to provide effective and timely assistance to State and local governments.

5. Federal departments and agencies would be expected to provide an initial response when warranted under their own authorities and funding. Decisions to mobilize Federal assets will be coordinated with the FBI and FEMA.

6. In the case of a biological WMD attack, the effect may be temporally and geographically dispersed, with no determined or defined "incident site." Response operations may be conducted over a multi-jurisdictional, multi-State region.

7. A biological WMD attack employing a contagious agent may require quarantine by State and local health officials to contain the disease outbreak.

8. Local, State, and Federal responders will define working perimeters that overlap. Perimeters may be used by responders to control access to an affected area, to assign operational sectors among responding organizations, and to assess potential effects on the population and the environment. Control of these perimeters and response actions may be managed by different authorities, which will impede the effectiveness of the overall response if adequate coordination is not established.

9. If appropriate personal protective equipment and capabilities are not available and the area is contaminated with WMD materials, it is possible that response actions into a contaminated area may be delayed until the material has dissipated to a level that is safe for emergency response personnel to operate.

J. Training and Exercises

Federal agencies, in conjunction with State and local governments, will periodically exercise their roles and responsibilities designated under the CONPLAN. Federal agencies should coordinate their exercises with the Exercise Subgroup of the Interagency Working Group on Counterterrorism and other response agencies to avoid duplication, and, more importantly, to provide a forum to exercise coordination mechanisms among responding agencies.

Federal agencies will assist State and local governments design and improve their response capabilities to a terrorist threat or incident. Each agency should coordinate its training programs with other response agencies to avoid duplication and to make its training available to other agencies.

III. SITUATION

A. Introduction

The complexity, scope, and potential consequences of a terrorist threat or incident require that there be a rapid and decisive capability to resolve the situation. The resolution to an act of terrorism demands an extraordinary level of coordination of crisis and consequence management functions and technical expertise across all levels of government. No single Federal, State, or local governmental agency has the capability or requisite authority to respond independently and mitigate the consequences of such a threat to national security. The incident may affect a single location or multiple locations, each of which may be a disaster scene, a hazardous scene and/or a crime scene simultaneously.

B. Differences Between WMD Incidents and Other Incidents

As in all incidents, WMD incidents may involve mass casualties and damage to buildings or other types of property. However, there are several factors surrounding WMD incidents that are unlike any other type of incidents that must be taken into consideration when planning a response. First responders' ability to identify aspects of the incident (e.g., signs and symptoms exhibited by victims) and report them accurately will be key to maximizing the use of critical local resources and for triggering a Federal response.

1. The situation may not be recognizable until there are multiple casualties. Most chemical and biological agents are not detectable by methods used for explosives and firearms. Most agents can be carried in containers that look like ordinary items.
2. There may be multiple events (e.g., one event in an attempt to influence another event's outcome).

3. Responders are placed at a higher risk of becoming casualties. Because agents are not readily identifiable, responders may become contaminated before recognizing the agent involved. First responders may, in addition, be targets for secondary releases or explosions.
4. The location of the incident will be treated as a crime scene. As such, preservation and collection of evidence is critical. Therefore, it is important to ensure that actions on-scene are coordinated between response organizations to minimize any conflicts between law enforcement authorities, who view the incident as a crime scene, and other responders, who view it as a hazardous materials or disaster scene.
5. Contamination of critical facilities and large geographic areas may result. Victims may carry an agent unknowingly to public transportation facilities, businesses, residences, doctors' offices, walk-in medical clinics, or emergency rooms because they don't realize that they are contaminated. First responders may carry the agent to fire or precinct houses, hospitals, or to the locations of subsequent calls.
6. The scope of the incident may expand geometrically and may affect mutual aid jurisdictions. Airborne agents flow with the air current and may disseminate via ventilation systems, carrying the agents far from the initial source.
7. There will be a stronger reaction from the public than with other types of incidents. The thought of exposure to a chemical or biological agent or radiation evokes terror in most people. The fear of the unknown also makes the public's response more severe.
8. Time is working against responding elements. The incident can expand geometrically and very quickly. In addition, the effects of some chemicals and biological agents worsen over time.
9. Support facilities, such as utility stations and 911 centers along with critical infrastructures, are at risk as targets.
10. Specialized State and local response capabilities may be overwhelmed.

C. Threat Levels

The CONPLAN establishes a range of threat levels determined by the FBI that serve to frame the nature and scope of the Federal response. Each threat level provides for an escalating range of actions that will be implemented concurrently for crisis and consequence management. The Federal government will take

specific actions which are synchronized to each threat level, ensuring that all Federal agencies are operating with jointly and consistently executed plans. The Federal government will notify and coordinate with State and local governments, as necessary. The threat levels are described below:

1. Level #4 - Minimal Threat:

Received threats do not warrant actions beyond normal liaison notifications or placing assets or resources on a heightened alert (agencies are operating under normal day-to-day conditions).

2. Level #3 - Potential Threat:

Intelligence or an articulated threat indicates a potential for a terrorist incident. However, this threat has not yet been assessed as credible.

3. Level #2 - Credible Threat:

A threat assessment indicates that the potential threat is credible, and confirms the involvement of WMD in the developing terrorist incident. Intelligence will vary with each threat, and will impact the level of the Federal response. At this threat level, the situation requires the tailoring of response actions to use Federal resources needed to anticipate, prevent, and/or resolve the crisis. The Federal crisis management response will focus on law enforcement actions taken in the interest of public safety and welfare, and is predominantly concerned with preventing and resolving the threat. The Federal consequence management response will focus on contingency planning and pre-positioning of tailored resources, as required. The threat increases in significance when the presence of an explosive device or WMD capable of causing a significant destructive event, prior to actual injury or loss, is confirmed or when intelligence and circumstances indicate a high probability that a device exists. In this case, the threat has developed into a WMD terrorist situation requiring an immediate process to identify, acquire, and plan the use of Federal resources to augment State and local authorities in lessening or averting the potential consequence of a terrorist use or employment of WMD.

4. Level #1 - WMD Incident:

A WMD terrorism incident has occurred which requires an immediate process to identify, acquire, and plan the use of Federal resources to augment State and local authorities in response to limited or major consequences of a terrorist use or employment of WMD. This incident has resulted in mass casualties. The Federal response is primarily

directed toward public safety and welfare and the preservation of human life.

D. Lead Federal Agency Responsibilities

The LFA, in coordination with the appropriate Federal, State and local agencies, is responsible for formulating the Federal strategy and a coordinated Federal response. To accomplish that goal, the LFA must establish multi-agency coordination structures, as appropriate, at the incident scene, area, and national level. These structures are needed to perform oversight responsibilities in operations involving multiple agencies with direct statutory authority to respond to aspects of a single major incident or multiple incidents. Oversight responsibilities include:

- **Coordination.** Coordinate the determination of operational objectives, strategies, and priorities for the use of critical resources that have been allocated to the situation, and communicate multi-agency decisions back to individual agencies and incidents.
- **Situation Assessment.** Evaluate emerging threats, prioritize incidents, and project future needs.
- **Public Information.** As the spokesperson for the Federal response, the LFA is responsible for coordinating information dissemination to the White House, Congress, and other Federal, State and local government officials. In fulfilling this responsibility, the LFA ensures that the release of public information is coordinated between crisis and consequence management response entities. The Joint Information Center (JIC) is established by the LFA, under the operational control of the LFA's Public Information Officer, as a focal point for the coordination and provision of information to the public and media concerning the Federal response to the emergency. The JIC may be established in the same location as the FBI Joint Operations Center (JOC) or may be located at an on-scene location in coordination with State and local agencies. The following elements should be represented at the JIC: (1) FBI Public Information Officer and staff, (2) FEMA Public Information Officer and staff, (3) other Federal agency Public Information Officers, as needed, and (4) State and local Public Information Officers.

IV. CONCEPT OF OPERATIONS

A. Mission

The overall Lead Federal Agency, in conjunction with the lead agencies for crisis and consequence management response, and State and local authorities where appropriate, will notify, activate, deploy and employ Federal resources in response to a threat or act of terrorism. Operations will be conducted in accordance with statutory authorities and applicable plans and procedures, as modified by the policy guidelines established in PDD-39 and PDD-62. The overall LFA will continue operations until the crisis is resolved. Operations under the CONPLAN will then stand down, while operations under other Federal plans may continue to assist State and local governments with recovery.

B. Command and Control

Command and control of a terrorist threat or incident is a critical function that demands a unified framework for the preparation and execution of plans and orders. Emergency response organizations at all levels of government may manage command and control activities somewhat differently depending on the organization's history, the complexity of the crisis, and their capabilities and resources. Management of Federal, State and local response actions must, therefore, reflect an inherent flexibility in order to effectively address the entire spectrum of capabilities and resources across the United States. The resulting challenge is to integrate the different types of management systems and approaches utilized by all levels of government into a comprehensive and unified response to meet the unique needs and requirements of each incident.

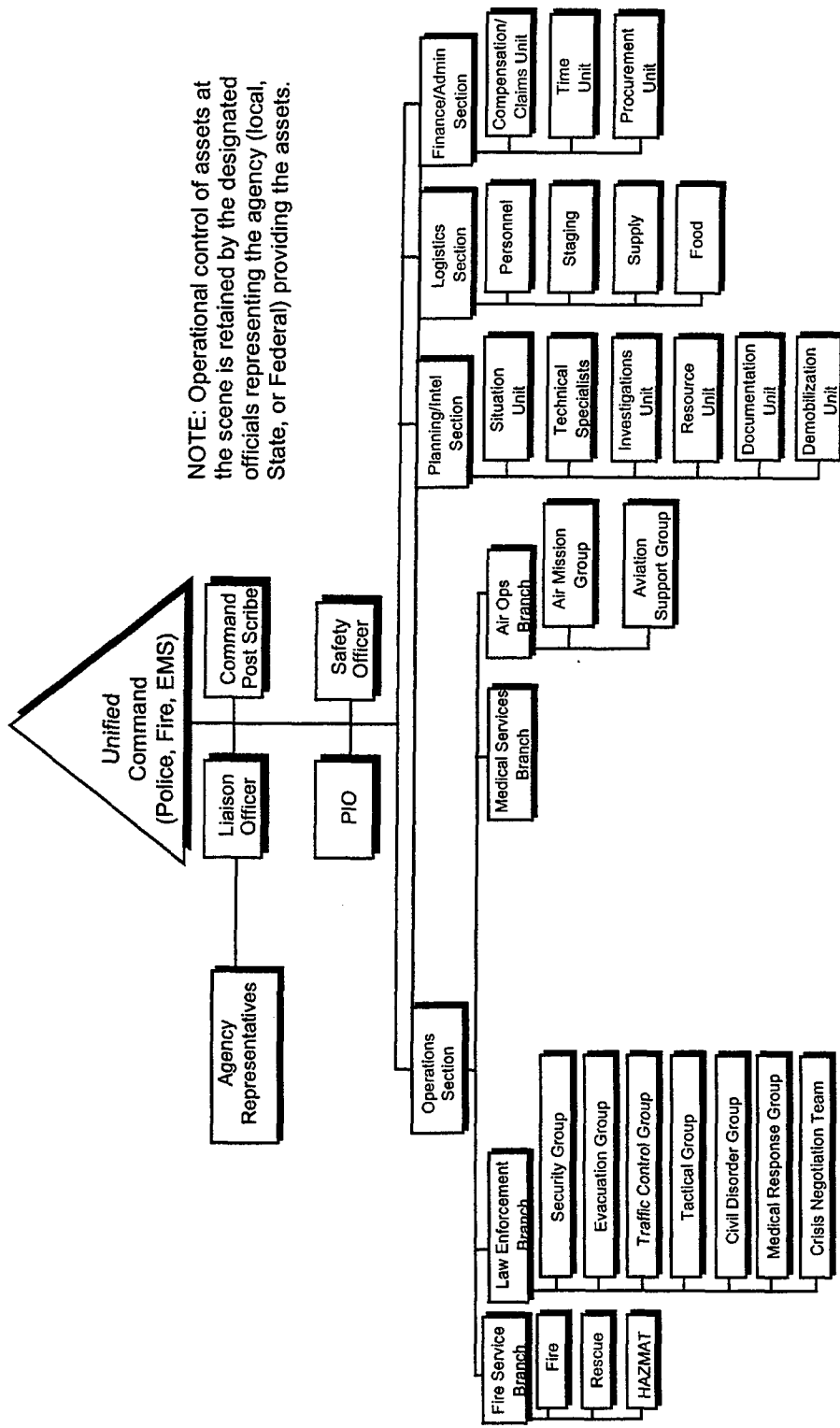
1. Consequence Management

State and local consequence management organizations are generally structured to respond to an incident scene using a modular, functionally-oriented ICS that can be tailored to the kind, size and management needs of the incident. ICS is employed to organize and unify multiple disciplines with multi-jurisdictional responsibilities on-scene under one functional organization. State and local emergency operations plans generally establish direction and control procedures for their agencies' response to disaster situations. The organization's staff is built from a "top-down" approach with responsibility and authority placed initially with an Incident Commander who determines which local resources will be deployed. In many States, State law or local jurisdiction ordinances will identify by organizational position the person(s) that will be responsible for serving as the incident commander. In most cases, the incident commander will come from the State or local organization that has primary responsibility for managing the emergency situation.

When the magnitude of a crisis exceeds the capabilities and resources of the local incident commander or multiple jurisdictions become involved in order to resolve the crisis situation, the ICS command function can readily evolve into a Unified Command (see Figure 1). Under Unified Command, a multi-agency command post is established incorporating officials from agencies with jurisdictional responsibility at the incident scene. Multiple agency resources and personnel will then be integrated into the ICS as the single overall response management structure at the incident scene.

Multi-agency coordination to provide resources to support on-scene operations in complex or multiple incidents is the responsibility of emergency management. In the emergency management system, requests for resources are filled at the lowest possible level of government. Requests that exceed available capabilities are progressively forwarded until filled, from a local Emergency Operations Center (EOC), to a State EOC, to Federal operations centers at the regional or national level.

State assistance may be provided to local governments in responding to a terrorist threat or recovering from the consequences of a terrorist incident as in any natural or man-made disaster. The governor, by State law, is the chief executive officer of the State or commonwealth and has full authority to discharge the duties of his office and exercise all powers associated with the operational control of the State's emergency services during a declared emergency. State agencies are responsible for ensuring that essential services and resources are available to the local authorities and Incident Commander when requested. When State assistance is provided, the local government retains overall responsibility for command and control of the emergency operations, except in cases where State or Federal statutes transfer authority to a specific State or Federal agency. State and local governments have primary responsibility for consequence management. FEMA, using the FRP, directs and coordinates all Federal response efforts to manage the consequences in domestic incidents, for which the President has declared, or expressed an intent to declare, an emergency.



NOTE: Operational control of assets at the scene is retained by the designated officials representing the agency (local, State, or Federal) providing the assets.

Figure 1 – Incident Command System / Unified Command

2. Crisis Management

As the lead agency for crisis management, the FBI manages a crisis situation from an FBI command post or JOC, bringing the necessary assets to respond and resolve the threat or incident. These activities primarily coordinate the law enforcement actions responding to the cause of the incident with State and local agencies.

During a crisis situation, the FBI Special Agent In Charge (SAC) of the local Field Division will establish a command post to manage the threat based upon a graduated and flexible response. This command post structure generally consists of three functional groups, Command, Operations, and Support, and is designed to accommodate participation of other agencies, as appropriate (see Figure 2). When the threat or incident exceeds the capabilities and resources of the local FBI Field Division, the SAC can request additional resources from the FBI's Critical Incident Response Group, located at Quantico, VA, to augment existing crisis management capabilities. In a terrorist threat or incident that may involve a WMD, the traditional FBI command post is expanded into a JOC incorporating a fourth functional entity, the Consequence Management Group.

Requests for DOD assistance for crisis management during the incident come from the Attorney General to the Secretary of Defense through the DOD Executive Secretary. Once the Secretary has approved the request, the order will be transmitted either directly to the unit involved or through the Chairman of the Joint Chiefs of Staff.

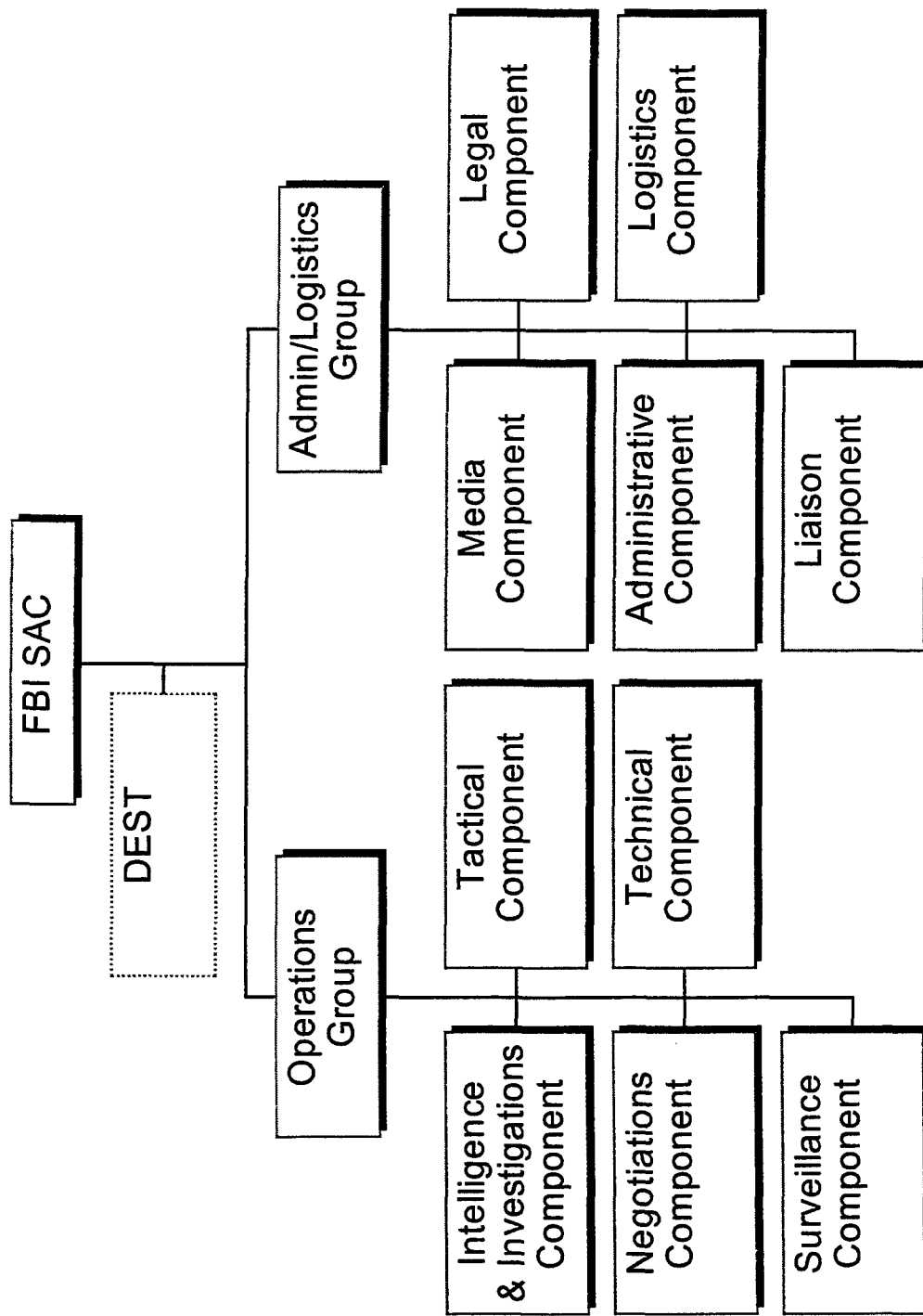


Figure 2 - FBI Command Post

C. Unification of Federal, State and Local Response

1. Introduction

Throughout the management of the terrorist incident, crisis and consequence management components will operate concurrently (see Figure 3). The concept of operations for a Federal response to a terrorist threat or incident provides for the designation of an LFA to ensure multi-agency coordination and a tailored, time-phased deployment of specialized Federal assets. It is critical that all participating Federal, State, and local agencies interact in a seamless manner.

2. National Level Coordination

The complexity and potential catastrophic consequences of a terrorist event will require application of a multi-agency coordination system at the Federal agency headquarters level. Many critical on-scene decisions may need to be made in consultation with higher authorities. In addition, the transfer of information between the headquarters and field levels is critical to the successful resolution of the crisis incident.

Upon determination of a credible threat, FBI Headquarters (FBIHQ) will activate its Strategic Information and Operations Center (SIOC) to coordinate and manage the national level support to a terrorism incident. At this level, the SIOC will generally mirror the JOC structure operating in the field. The SIOC is staffed by liaison officers from other Federal agencies that are required to provide direct support to the FBI, in accordance with PDD-39. The SIOC performs the critical functions of coordinating the Federal response and facilitating Federal agency headquarters connectivity. Affected Federal agencies will operate headquarters-level emergency operations centers, as necessary.

Upon notification by the FBI of a credible terrorist threat, FEMA may activate its Catastrophic Disaster Response Group. In addition, FEMA will activate the Regional Operations Center and Emergency Support Team, as required.

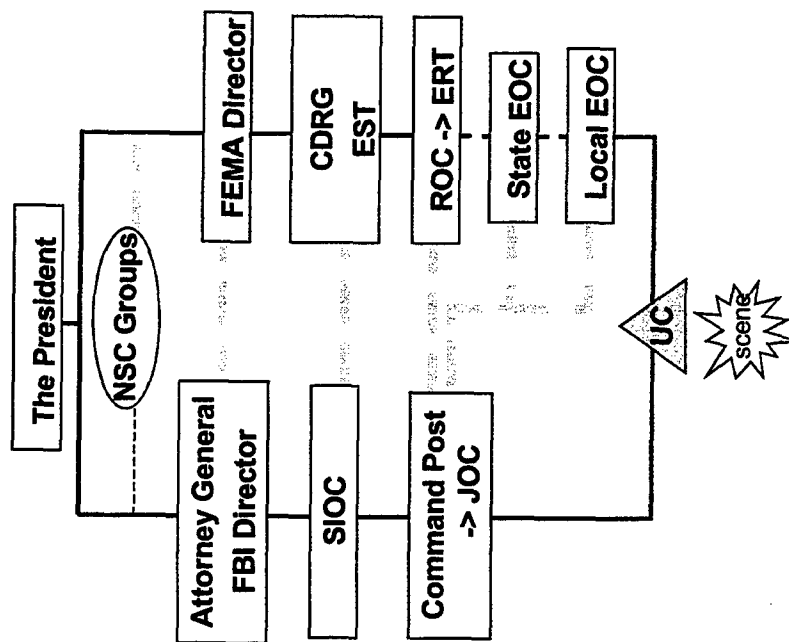


Figure 3 – Coordinating Relationships

3. Field Level Coordination

During a terrorist incident, the organizational structure to implement the Federal response at the field level is the JOC. The JOC is established by the FBI under the operational control of the Federal OSC, and acts as the focal point for the strategic management and direction of on-site activities, identification of State and local requirements and priorities, and coordination of the Federal response. The local FBI field office will activate a Crisis Management Team to establish the JOC, which will be in the affected area, possibly collocated with an existing emergency operations facility. Additionally, the JOC will be augmented by outside agencies, including representatives from the DEST (if deployed), who provide interagency technical expertise as well as inter-agency continuity during the transition from an FBI command post structure to the JOC structure.

Similar to the Area Command concept within the ICS, the JOC is established to ensure inter-incident coordination and to organize multiple agencies and jurisdictions within an overall command and coordination structure. The JOC includes the following functional groups: Command, Operations, Admin/Logistics, and Consequence Management (see Figure 4). Representation within the JOC includes officials from local, State and Federal agencies with specific roles in crisis and consequence management.

The Command Group of the JOC is responsible for providing recommendations and advice to the Federal OSC regarding the development and implementation of strategic decisions to resolve the crisis situation and for approving the deployment and employment of resources. In this scope, the members of the Command Group play an important role in ensuring the coordination of Federal crisis and consequence management functions. The Command Group is composed of the FBI Federal OSC and senior officials with decision making authority from local, State, and Federal agencies, as appropriate, based upon the circumstances of the threat or incident. Strategies, tactics and priorities are jointly determined within this group. While the FBI retains authority to make Federal crisis management decisions at all times, operational decisions are made cooperatively to the greatest extent possible. The FBI Federal OSC and the senior FEMA official at the JOC will provide, or obtain from higher authority, an immediate resolution of conflicts in priorities for allocation of critical Federal resources between the crisis and consequence management responses.

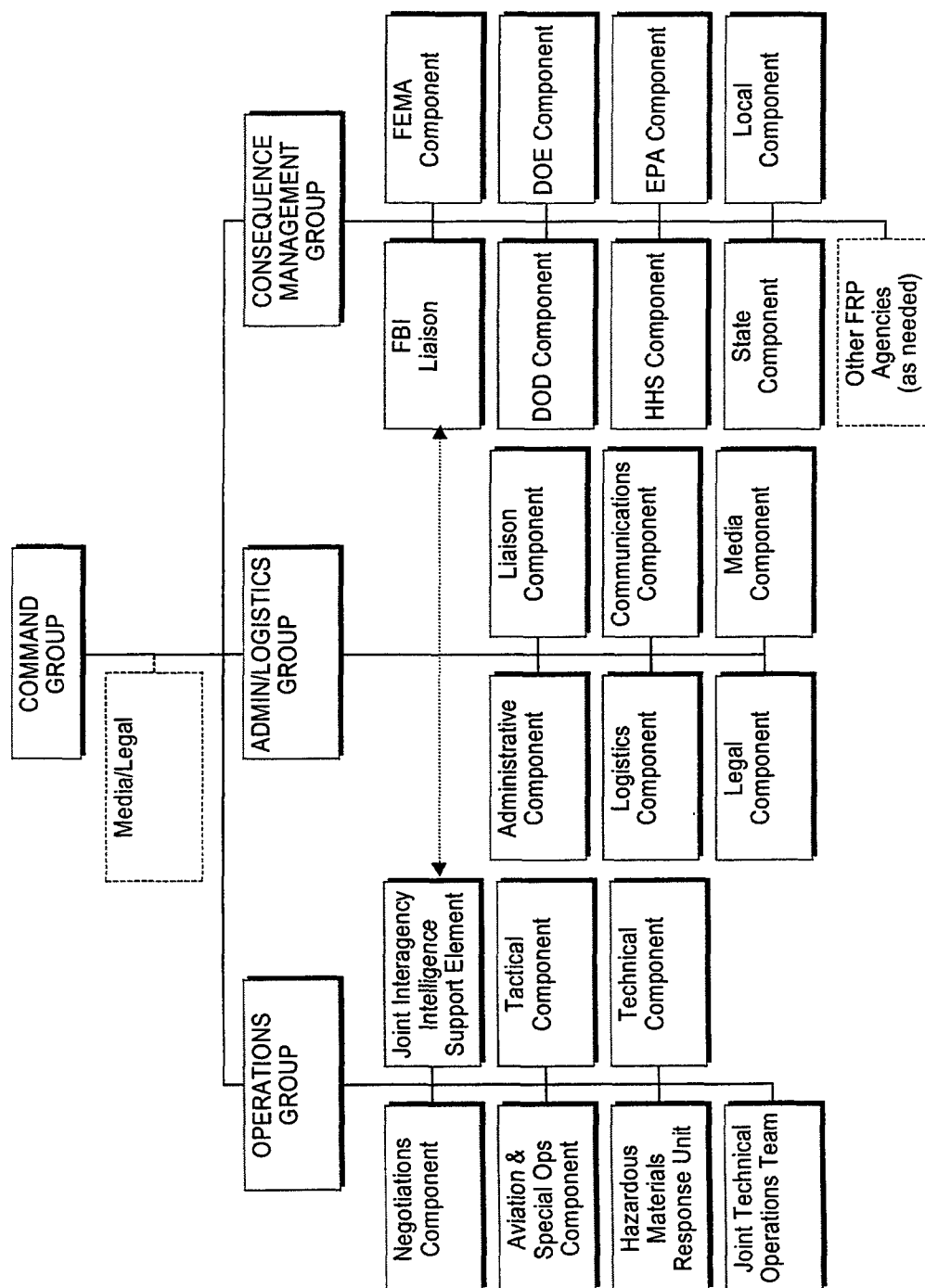


Figure 4 - Joint Operations Center

A FEMA representative coordinates the actions of the JOC Consequence Management Group, and expedites activation of a Federal consequence management response should it become necessary. FBI and FEMA representatives will screen threat/incident intelligence for the Consequence Management Group. The JOC Consequence Management Group monitors the crisis management response in order to advise on decisions that may have implications for consequence management, and to provide continuity should a Federal consequence management response become necessary.

Should the threat of a terrorist incident become imminent, the JOC Consequence Management Group may forward recommendations to the ROC Director to initiate limited pre-deployment of assets under the Stafford Act. Authority to make decisions regarding FRP operations rests with the ROC Director until an FCO is appointed. The senior FEMA official in the JOC ensures appropriate coordination between FRP operations and the JOC Command Group.

4. On-Scene Coordination

Once a WMD incident has occurred (with or without a pre-release crisis period), local government emergency response organizations will respond to the incident scene and appropriate notifications to local, State, and Federal authorities will be made. Control of this incident scene will be established by local response authorities (likely a senior fire or law enforcement official). Command and control of the incident scene is vested with the Incident Commander/Unified Command. Operational control of assets at the scene is retained by the designated officials representing the agency (local, State, or Federal) providing the assets. These officials manage tactical operations at the scene in coordination with the UC as directed by their agency counterparts at field-level operational centers, if used. As mutual aid partners, State and Federal responders arrive to augment the local responders. The incident command structure that was initially established will likely transition into a Unified Command (UC). This UC structure will facilitate both crisis and consequence management activities. The UC structure used at the scene will expand as support units and agency representatives arrive to support crisis and consequence management operations. On-scene consequence management activities will be supported by the local and State EOC, which will be augmented by the ROC or Disaster Field Office, and the Emergency Support Team, as appropriate.

When Federal resources arrive at the scene, they will operate as a Forward Coordinating Team (FCT). The senior FBI representative will join the Unified Command group while the senior FEMA representative

will coordinate activity of Federal consequence management liaisons to the Unified Command. On-scene Federal crisis management resources will be organized into a separate FBI Crisis Management Branch within the Operations Section, and an FBI representative will serve as Deputy to the Operations Section Chief. Federal consequence management resources will assist the appropriate ICS function, as directed (see Figure 5).

Throughout the incident, the actions and activities of the Unified Command at the incident scene and the Command Group of the JOC will be continuously and completely coordinated.

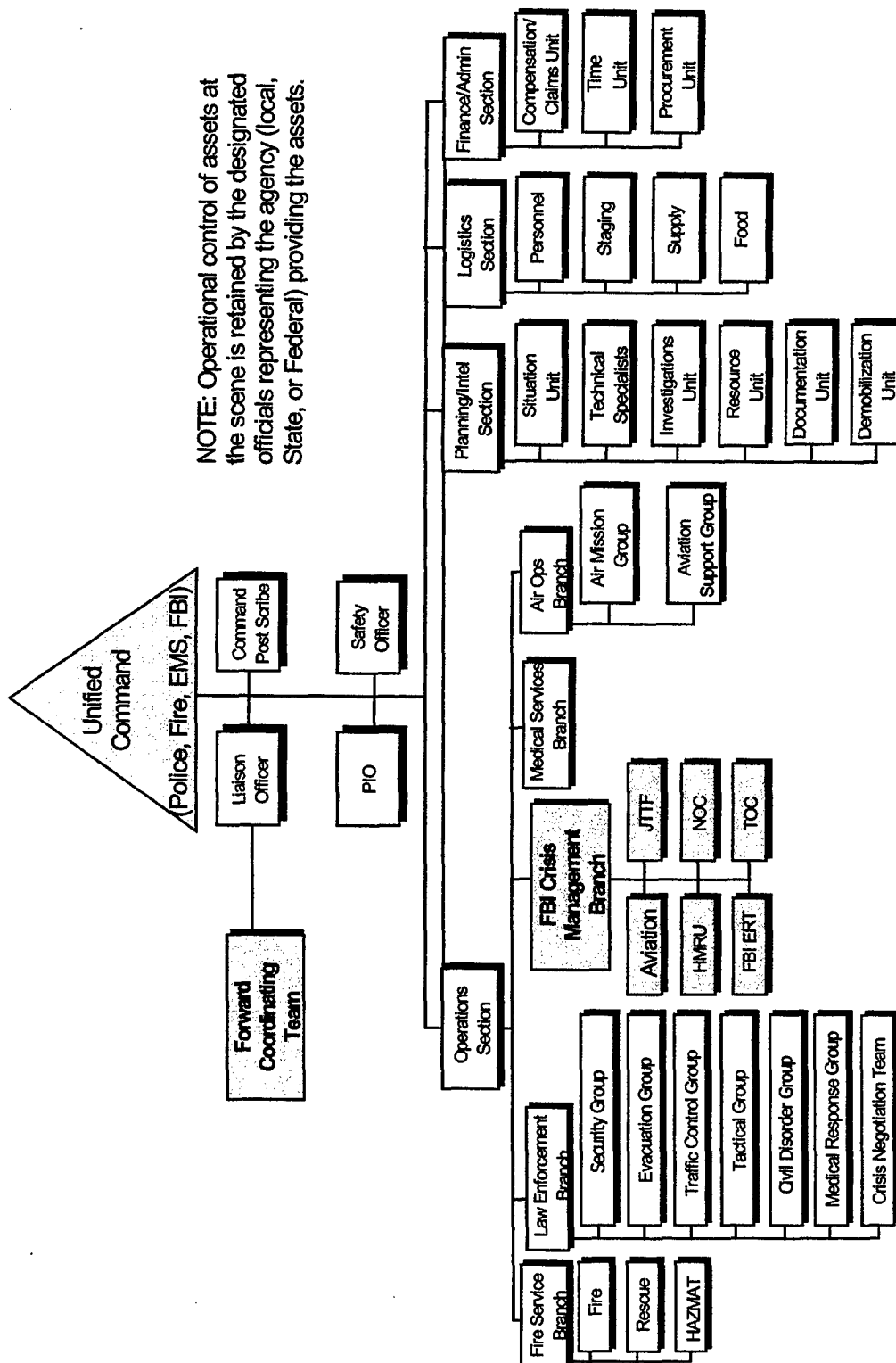


Figure 5 – On-Scene Coordination

V. PHASING OF THE FEDERAL RESPONSE

Phasing of the Federal response to a threat or act of terrorism includes Notification; Activation and Deployment; Response Operations; Response Deactivation; and Recovery. Phases may be abbreviated or bypassed when warranted.

A. Notification

Receipt of a terrorist threat or incident may be through any source or medium, may be articulated, or developed through intelligence sources. It is the responsibility of all local, State, and Federal agencies and departments to notify the FBI when such a threat is received.

Upon receipt of a threat of domestic terrorism, the FBI will conduct a formal threat credibility assessment of the information with assistance from select interagency experts. For a WMD threat, this includes three perspectives:

- Technical feasibility: An assessment of the capacity of the threatening individual or organization to obtain or produce the material at issue;
- Operational practicability: An assessment of the feasibility of delivering or employing the material in the manner threatened;
- Behavioral resolve: A psychological assessment of the likelihood that the subject(s) will carry out the threat, including a review of any written or verbal statement by the subject(s).

The FBI manages a Terrorist Threat Warning System to ensure that vital information regarding terrorism reaches those in the U.S. counterterrorism and law enforcement community responsible for countering terrorist threats. This information is transmitted via secure teletype. Each message transmitted under this system is an alert, an advisory, or an assessment—an alert if the terrorist threat is credible and specific; an advisory if the threat is credible but general in both timing and target; or an assessment to impart facts and/or threat analysis concerning terrorism.

1. The role of the FBI is to:

- a. Verify the accuracy of the notification,
- b. Initiate the threat assessment process,
- c. Notify Domestic Emergency Support Team agencies, and

d. Notify other Federal, State and local agencies, as appropriate.

2. The role of FEMA is to:

a. Advise the FBI of consequence management considerations,

b. Verify that the State and local governments have been notified, and

c. Notify other Federal agencies under the FRP, as appropriate.

B. Activation and Deployment

Upon determination that the threat is credible, or an act of terrorism has occurred, FBIHQ will initiate appropriate liaison with other Federal agencies to activate their operations centers and provide liaison officers to the SIOC. In addition, FBIHQ will initiate communications with the SAC of the responsible Field Office apprising him/her of possible courses of action and discussing deployment of the DEST. The FBI SAC will establish initial operational priorities based upon the specific circumstances of the threat or incident. This information will then be forwarded to FBIHQ to coordinate identification and deployment of appropriate resources.

Based upon a credible threat assessment and a request by the SAC, the FBI Director, in consultation with the Attorney General, may request authorization through National Security Council groups to deploy the DEST to assist the SAC in mitigating the crisis situation. The DEST is a rapidly deployable, inter-agency team responsible for providing the FBI expert advice and support concerning the U.S. Government's capabilities in resolving the terrorist threat or incident. This includes crisis and consequence management assistance, technical or scientific advice and contingency planning guidance tailored to situations involving chemical, biological, or nuclear/radiological weapons.

Upon arrival at the FBI Command Post or forward location, the DEST may act as a stand alone advisory team to the SAC providing recommended courses of action. While the DEST can operate as an advance element of the JOC, DEST deployment does not have to precede JOC activation. Upon JOC activation, the SAC is the Federal On-Scene Commander (OSC). The Federal OSC serves as the on-scene manager for the United States Government and coordinates the actions of the JOC Command Group. The DEST consequence management component merges into the JOC structure under the leadership of the Senior FEMA Official.

1. The role of the FBI is to:

- a. Designate a Federal OSC,
- b. Deploy the DEST if warranted and approved, and provide liaison to State and local authorities as appropriate,
- c. Establish multi-agency coordination structures, as appropriate, at the incident scene, area, and national level in order to:
 - (1) Coordinate the determination of operational objectives, strategies, and priorities for the use of critical resources that have been allocated to the situation, and communicate multi-agency decisions back to individual agencies and incidents.
 - (2) Coordinate the evaluation of emerging incidents, prioritization of incidents, and projection of future needs.
 - (3) Establish a Joint Information Center and coordinate information dissemination.

2. The role of FEMA is to:

- a. Activate the appropriate FRP elements, as needed,
- b. Designate and deploy an individual to serve as the Senior FEMA Official to the JOC. Primary responsibilities include:
 - (1) Managing the Consequence Management Group.
 - (2) Serving as senior consequence management official on the Command Group.
 - (3) Designate an individual to work with the FBI liaison to screen intelligence for consequence management related implications.
- c. Identify the appropriate agencies to staff the JOC Consequence Management Group and advise the FBI. With FBI concurrence, notify consequence management agencies to request they deploy representatives to the JOC.

C. Response Operations

The response operations phase involves those activities necessary for an actual Federal response to address the immediate and short-term effects of a terrorist threat or incident. These activities support an emergency response with a bilateral focus on the achievement of law enforcement goals and objectives, and the planning and execution of consequence management activities to address the effects of a terrorist incident. Prior to the use or functioning of a WMD, crisis management activities will generally have priority. When an incident results in the use of WMD, consequence management activities will generally have priority. Activities may overlap and/or run concurrently during the emergency response, and are dependent on the threat and/or the strategies for responding to the incident. Events may preclude certain activities from occurring, particularly in an attack without prior warning.

D. Response Deactivation

Each Federal agency will discontinue emergency response operations under the CONPLAN when advised that their assistance is no longer required in support of the FBI, or when their statutory responsibilities have been fulfilled.

Upon determination that applicable law enforcement goals and objectives have been met, no further immediate threat exists, and that Federal crisis management actions are no longer required, the Attorney General, in consultation with the FBI Director and the FEMA Director, shall transfer the LFA role to FEMA. The Federal OSC will deactivate and discontinue emergency response operations under the CONPLAN. Prior to this activity, the Federal OSC will apprise the senior officials representing agencies in the JOC Command Group of the intent to deactivate in order to confirm agreement for this decision.

Consequence management support to the State and local government(s) impacted by the incident may continue for a very long period. Termination of consequence management assistance will be handled according to the procedures established in the FRP.

E. Recovery

The State and local governments share primary responsibility for planning the recovery of the affected area. Recovery efforts will be initiated at the request of the State or local governments following mutual agreement of the agencies involved and confirmation from the LFA that the incident has stabilized and that no further threat exists to public health and safety. The Federal government will assist the State and local governments in developing mitigation and recovery plans, with FEMA coordinating the overall activity of the Federal agencies involved in this phase.

APPENDIX A: ACRONYMS

CONPLAN	Concept of Operations Plan
DEST	Domestic Emergency Support Team
DOD	Department of Defense
DOE	Department of Energy
DOJ	Department of Justice
EM	Emergency Management
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EPA	Environmental Protection Agency
ERT	Evidence Response Team (FBI)
FBI	Federal Bureau of Investigation
FCO	Federal Coordinating Officer
FEMA	Federal Emergency Management Agency
FRP	Federal Response Plan
HAZMAT	Hazardous Materials
HHS	Department of Health and Human Services
HMRU	Hazardous Materials Response Unit
JIC	Joint Information Center
JIIE	Joint Interagency Intelligence Support Element
JOC	Joint Operations Center
JTTF	Joint Terrorism Task Force
ICS	Incident Command System
LFA	Lead Federal Agency
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NOC	Negotiations Operations Center
OSC	On-Scene Commander (FBI) On-Scene Coordinator (EPA)
PIO	Public Information Officer
PDD-39	Presidential Decision Directive 39
ROC	Regional Operations Center
SAC	Special Agent-in-Charge
SFO	Senior FEMA Official
SIOC	Strategic Information and Operations Center
STOC	Sniper Tactical Operations Center
TOC	Tactical Operations Center
UC	Unified Command
USCG	United States Coast Guard
WMD	Weapon of Mass Destruction

APPENDIX B: DEFINITIONS

Assessment - The evaluation and interpretation of measurements and other information to provide a basis for decision-making.

Combating Terrorism - The full range of Federal programs and activities applied against terrorism, domestically and abroad, regardless of the source or motive.

Consequence Management - Consequence management is predominantly an emergency management function and includes measures to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of terrorism. In an actual or potential terrorist incident, a consequence management response will be managed by FEMA using structures and resources of the Federal Response Plan (FRP). These efforts will include support missions as described in other Federal operations plans, such as predictive modeling, protective action recommendations, and mass decontamination.

Coordinate - To advance systematically an exchange of information among principals who have or may have a need to know certain information in order to carry out their role in a response.

Counterterrorism - The full range of activities directed against terrorism, including preventive, deterrent, response and crisis management efforts.

Crisis Management - Crisis management is predominantly a law enforcement function and includes measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or act of terrorism. In a terrorist incident, a crisis management response may include traditional law enforcement missions, such as intelligence, surveillance, tactical operations, negotiations, forensics, and investigations, as well as technical support missions, such as agent identification, search, render safe procedures, transfer and disposal, and limited decontamination. In addition to the traditional law enforcement missions, crisis management also includes assurance of public health and safety.

Disaster Field Office (DFO) - The office established in or near the designated area to support Federal and State response and recovery operations. The Disaster Field Office houses the Federal Coordinating Officer (FCO), the Emergency Response Team, and, where possible, the State Coordinating Officer and support Staff.

Emergency - Any natural or man-caused situation that results in or may result in substantial injury or harm to the population or substantial damage to or loss of property.

Emergency Operations Center (EOC)- The site from which civil government officials (municipal, county, State and Federal) exercise direction and control in an emergency.

Emergency Public Information - Information which is disseminated primarily in anticipation of an emergency or at the actual time of an emergency and in addition to providing information, frequently directs actions, instructs, and transmits direct orders.

Emergency Response Team - (1) A team composed of Federal program and support personnel, which FEMA activates and deploys into an area affected by a major disaster or emergency. This team assists the FCO in carrying out his/her responsibilities under the Stafford Act, the declaration, applicable laws, regulations, and the FEMA-State agreement. (2) The team is an interagency team, consisting of the lead representative from each Federal department or agency assigned primary responsibility for an Emergency support Function and key members of the FCO's staff, formed to assist the FCO in carrying out his/her responsibilities. The team provides a forum for coordinating the overall Federal consequence management response requirements.

Emergency Support Function - A functional area of response activity established to facilitate coordinated Federal delivery of assistance required during the response phase to save lives, protect property and health, and maintain public safety. These functions represent those types of Federal assistance which the State likely will need most because of the overwhelming impact of a catastrophic event on local and State resources.

Evacuation - Organized, phased, and supervised dispersal of civilians from dangerous or potentially dangerous areas, and their reception and care in safe areas.

Federal Coordinating Officer (FCO) - (1) The person appointed by the FEMA Director, or in his/her absence, the FEMA Deputy Director, or alternatively the FEMA Associate Director for Response and Recovery, following a declaration of a major disaster or of an emergency by the President, to coordinate Federal assistance. The FCO initiates action immediately to assure that Federal Assistance is provided in accordance with the declaration, applicable laws, regulations, and the FEMA-State agreement. (2) The FCO is the senior Federal official appointed in accordance with the provisions of Public Law 93-288, as amended (the Stafford Act), to coordinate the overall consequence management response and recovery activities. The FCO represents the President as provided by Section 303 of the Stafford Act for the purpose of coordinating the administration of Federal relief activities in the designated area. Additionally, the FCO is delegated responsibilities and performs those for the FEMA Director as outlined in Executive Order 12148 and those responsibilities delegated to the FEMA Regional Director in the Code of Federal Regulations, Title 44, Part 205.

Federal On-Scene Commander (OSC) - The FBI official designated upon JOC activation to ensure appropriate coordination of the overall United States government response with Federal, State and local authorities, until such time as the Attorney General transfers the LFA role to FEMA.

Federal Response Plan (FRP) - (1) The plan designed to address the consequences of any disaster or emergency situation in which there is a need for Federal assistance under the authorities of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U. S.C. 5 121 et seq. (2) The FRP is the Federal government's plan of action for assisting affected States and local jurisdictions in the event of a major disaster or emergency.

First Responder - Local police, fire, and emergency medical personnel who first arrive on the scene of an incident and take action to save lives, protect property, and meet basic human needs.

Joint Information Center (JIC) - A center established to coordinate the Federal public information activities on-scene. It is the central point of contact for all news media at the scene of the incident. Public information officials from all participating Federal agencies should collocate at the JIC. Public information officials from participating State and local agencies also may collocate at the JIC.

Joint Interagency Intelligence Support Element (JIISE) - The JIISE is an interagency intelligence component designed to fuse intelligence information from the various agencies participating in a response to a WMD threat or incident within an FBI JOC. The JIISE is an expanded version of the investigative/intelligence component which is part of the standardized FBI command post structure. The JIISE manages five functions including: security, collections management, current intelligence, exploitation, and dissemination.

Joint Operations Center (JOC) - Established by the LFA under the operational control of the Federal OSC, as the focal point for management and direction of onsite activities, coordination/establishment of State requirements/priorities, and coordination of the overall Federal response.

Lead Agency - The Federal department or agency assigned lead responsibility under U.S. law to manage and coordinate the Federal response in a specific functional area. For the purposes of the CONPLAN, there are two lead agencies, the FBI for Crisis Management and FEMA for Consequence Management. Lead agencies support the overall Lead Federal Agency (LFA) during all phases of the response.

Lead Federal Agency (LFA) - The agency designated by the President to lead and coordinate the overall Federal response is referred to as the LFA and is determined by the type of emergency. In general, an LFA establishes operational structures and procedures to assemble and work with agencies providing direct support to the LFA

in order to provide an initial assessment of the situation; develop an action plan; monitor and update operational priorities; and ensure each agency exercises its concurrent and distinct authorities under US law and supports the LFA in carrying out the President's relevant policy. Specific responsibilities of an LFA vary according to the agency's unique statutory authorities.

Liaison - An agency official sent to another agency to facilitate interagency communications and coordination.

Local Government - Any county, city, village, town, district, or political subdivision of any State, and Indian tribe or authorized tribal organization, or Alaska Native village or organization, including any rural community or unincorporated town or village or any other public entity.

On-Scene Coordinator (OSC) - The Federal official pre-designated by the EPA and U.S. Coast Guard to coordinate and direct response and removals under the National Oil and Hazardous Substances Pollution Contingency Plan.

Public Information Officer - Official at headquarters or in the field responsible for preparing and coordinating the dissemination of public information in cooperation with other responding Federal, State, and local agencies.

Recovery - Recovery, in this document, includes all types of emergency actions dedicated to the continued protection of the public or to promoting the resumption of normal activities in the affected area.

Recovery Plan - A plan developed by each State, with assistance from the responding Federal agencies, to restore the affected area.

Regional Director - The Director of one of FEMA's ten regional offices and principal representative for working with other Federal regions, State and local governments, and the private sector in that jurisdiction.

Regional Operations Center (ROC) - The temporary operations facility for the coordination of Federal response and recovery activities, located at the FEMA Regional Office (or at the Federal Regional Center) and led by the FEMA Regional Director or Deputy Regional Director until the Disaster Field Office becomes operational.

Response - Those activities and programs designed to address the immediate and short-term effects of the onset of an emergency or disaster.

Senior FEMA Official (SFO) - The official appointed by the Director of FEMA, or his representative, that is responsible for deploying to the JOC to: (1) serve as the senior

interagency consequence management representative on the Command Group, and (2) manage and coordinate activities taken by the Consequence Management Group.

State Coordinating Officer - An official designated by the Governor of the affected State, upon a declaration of a major disaster or emergency, to coordinate State and local disaster assistance efforts with those of the Federal government, and to act in cooperation with the FCO to administer disaster recovery efforts.

Terrorism - Terrorism includes the unlawful use of force or violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.

Weapon of Mass Destruction (WMD) - A WMD is any device, material, or substance used in a manner, in a quantity or type, or under circumstances evidencing an intent to cause death or serious injury to persons or significant damage to property.

DOCUMENT 5

Doctrine for Domestic Disaster Response Activities

AD-A381874



May 2000

**Army Command and General Staff College
School of Advanced Military Studies
Fort Leavenworth, KS**

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Doctrine for Domestic Disaster Response Activities

**A Monograph
By
Major Dave Wellons
United States Army**

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**Title of Monograph:
Doctrine for Domestic Disaster Response Activities**

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ABSTRACT

DOCTRINE FOR DOMESTIC DISASTER RELIEF ACTIVITIES, by Major Dave Wellons, USA, 49 pages.

This monograph examines two disasters, Hurricanes Andrew (1991) and Marilyn (1995), and the U.S. Army's support to the Federal Emergency Management Agency (FEMA) to determine whether Joint and Army doctrine provides doctrinal tools for Defense Coordination Element (DCE) planning. Two recent disasters, Hurricanes Andrew and Marilyn, provide detailed lessons learned and after action reports to examine the role of the DCE in planning military activities during federally declared disaster relief operations.

First, this monograph begins by discussing the legal and regulatory basis that established the unique relationship between Federal Emergency Management Agency (FEMA) and the military during federally declared disasters. The Federal Response Plan, FEMA's emergency response planning document, outlines the functional coordination and lead agency responsibilities during disaster response and recovery operations. Department of Defense (DoD) Directives and Army regulations provide the Defense Coordinating Officer and his staff the legal basis for military support during these operations. The operational and tactical requirements of the DCE are found by reviewing post incident reports from large-scale disasters such as Hurricane Andrew.

To define the operational and tactical environment, this monograph examines the after-action reports from Hurricane Andrew and Hurricane Marilyn. Similar essential tasks are identified at both the operational and tactical level. Tasks found in these after action reports form the basis for developing a key tasks list outlining what a DCE planner must address when conducting future disaster response activities.

After identifying these tasks, this monograph compares these recurring tasks to the principles of Operations Other Than War (OOTW) found in field manual (FM) 100-19 and joint publication (JP) 3-07. Operational and tactical requirements are evaluated against the principles of OOTW to determine if that framework provides the doctrinal tools necessary for planning disaster response activities.

This research concludes that Joint MOOTW doctrine provides a partial framework consisting of planning considerations and the principles of OOTW. However, it does not address the FEMA's ESF framework or the legal basis for domestic disaster relief operations. At the tactical level, Joint and Army doctrine does not provide the tools necessary for planning and executing disaster relief. Tactical requirements can be interpolated from the principles of OOTW, however the DCE staff needs disaster response tactics, techniques and procedure (TTP) doctrine.

TABLE OF CONTENTS

<u>TABLE OF CONTENTS</u>	iv
<u>Introduction</u>	1
<u>Chapter 1: Regulatory Basis for Domestic Disaster Response</u>	5
<u>Federal Laws</u>	5
<u>Department of Defense Roles and Responsibilities</u>	11
<u>Defense Coordinating Officer</u>	12
<u>Spectrum of Military Operations</u>	14
<u>Chapter 2: DCE Supported Domestic Disaster Response Activities</u>	17
<u>Hurricane Andrew (1991)</u>	17
<u>Hurricane Marilyn (1995)</u>	22
<u>Key Doctrinal Tools</u>	27
<u>Chapter 3: Analysis of Doctrine</u>	28
<u>Operational Tools – Joint Doctrine</u>	29
<u>Operational Tools – Army Doctrine</u>	33
<u>Tactics, Techniques and Procedures for Domestic Disaster Response</u>	36
<u>Conclusions</u>	38
<u>Appendix A, FEMA Emergency Support Functions</u>	41
<u>ESFs Defined</u>	41
<u>Federal Agencies FEMA ESF Relationships</u>	43
<u>Endnotes</u>	44
<u>Bibliography</u>	51

INTRODUCTION

On 14 September 1995, a hurricane watch was issued and a state of emergency declared by the territorial government of the U.S. Virgin Islands (U.S.V.I.). Readiness Group Redstone was alerted by First Continental United States Army to prepare for possible deployment to the U.S.V.I. to establish a Defense Coordination Element (DCE) to coordinate Military Activities to Civil Authorities (MACA) response operations. The First U.S. Army Emergency Operations Center (EOC) was activated and began 24 hour operations. On 15 September 1995, the DCE Emergency Response Team Alpha (ERT-A) for St. Thomas and St. Croix departed Atlanta at 0712 via Delta Airlines arriving San Juan, Puerto Rico at 1025 a.m. Hurricane Marilyn made landfall on the Virgin Islands at 151800 September 1995. On 16 September 1995, the President declared the Virgin Islands a federal disaster area. COL Billy Stevens was designated the Defense Coordinating Officer effective 161330 September 1995.¹

During those late evening hours of 15 September 1995 a category two hurricane² attacked the Caribbean isles of Saint Thomas, Saint Johns and Saint Croix in the U.S. Virgin Islands, a well known vacation destination with a tourist based economy. The storm struck the coast with 130 plus mile per hour winds that pushed an 8-foot wall of water through the tropical harbor known as Charlotte Amalie Bay. This storm surge lifted pleasure craft, 40-foot yachts and even the US Coast Guard cutter out of their moorings in the harbor and crashed them upon the streets and sea walls lining the harbor. The winds and torrential rains tore through the harbor community destroying homes, public buildings and businesses leaving behind a debris-strewn landscape.³ In less than six hours this hurricane inflicted more than 500 million dollars of damage upon this tropical paradise.⁴

Initial damage assessments were beyond belief. The damage was unimagined by the members of the Virgin Island Territorial Emergency Management agency, the Defense Coordination Element (DCE) early response teams (ERT) or the federal emergency management agency (FEMA) ERT as they surveyed the damage during the morning hours of September 16 and 17. Many questions and planning issues faced COL Stevens and his 13 person ERT as their military transport landed on the debris strewn airport. Every DCO and their staff face the same uncertainties when planning disaster response operations. The very process of disaster response causes the military planner to use crisis action planning. This monograph examines the tasks the DCO and his staff performs while conducting domestic disaster response operations and whether army and joint doctrine provide a planning framework and tactics, techniques and procedures to accomplish those tasks.

Planning, and preparing Army forces to conduct these operations requires both operational doctrine that outlines planning principles and "tactical" manuals containing tactics, techniques and procedures for common disaster response activities. Army doctrine for domestic support operations is contained in FM 100-19, *Domestic Support Operations*. Army schools teach war fighting doctrine that prepares a DCO and his staff for military offensive and defensive operations. Since war fighting operations are our primary military task, DCOs do not receive the same amount of instruction for military operations other than war. Officers selected to support domestic disaster response activities must rely on Army and joint doctrine for planning principles, tactics, techniques and procedures.

In assessing whether joint and Army doctrine provides the tools necessary for the DCO and his staff to conduct DCE operations, this paper first reviews the statutory basis for active duty support to FEMA. Federal Law, Executive orders, Department of Defense (DoD)

Directives and military regulations outline the expectations and limitations of military support to civil authorities. These regulations define the operational capabilities upon which FEMA draws during disaster response. A military planner preparing for DCE operations must understand the directives and regulations as well as the traditional military resources requested by FEMA.

Hurricane Andrew and Marilyn were chosen as case studies to determine the anticipated taskings a DCE planner can expect and to limit the study to a worse case scenario. Other forms of domestic support such as law enforcement, environmental assistance and community assistance are not addressed in this monograph. Although this paper focuses on DCE planning for hurricanes, lessons learned from hurricanes can also be applied to other natural disasters where community homes, businesses and infrastructure are damaged or destroyed.

Hurricanes cause extensive damage to homes, businesses, and federal property thus providing a worse case scenario. Catastrophic damage to community infrastructure frequently exceeds the capabilities of local and state emergency resources resulting in federal support. Both Hurricane Andrew and Marilyn required military support. After each operation, the military prepared detailed after action reports and key lessons learned.⁵ These reports provide this monograph with the key tasks a military planner can expect to conduct during response operations. Tasks identified by the federal law and historical taskings from prior hurricanes establish the expectations for future operational and tactical requirements. Identifying the expected and potential taskings defines the realm of possible DCE operations for the planner.

After identifying the realm of the possible, this monograph compares these recurring tasks to the principles of Operations Other Than War (OOTW) and the planning framework found in Army field manuals and joint publications. The key doctrinal manuals used in this analysis are FM 100-5, *Operations*; FM 100-19, *Domestic Support Operations*; JP 3-0,

Operations; and JP 3-07, *Joint Doctrine for Military Operations Other Than War*. The OOTW principles of objective, unity of effort, legitimacy, perseverance, restraint, and security are evaluated to determine whether they provide planning principles for the DCE Planner. Additionally, Army doctrine is examined to determine if FEMA's framework for organizing the disaster response "battlefield" is included in domestic support doctrine. An evaluation of the principles and planning framework with regard to the expected task list determines whether the DCO is provided the necessary doctrinal tools for planning disaster response activities.

CHAPTER 1: REGULATORY BASIS FOR DOMESTIC DISASTER RESPONSE

Throughout United States history, the military has assisted civil authorities during civil disturbances, and natural or manmade disasters. Dating back to 1803, the federal government assisted states by planning and mitigating the damage caused by natural disasters.⁶ Since 1803, federal support has been provided to communities throughout the United States and its territories more than 100 times. During disasters such as the wild fires, or earthquakes, hurricanes or tornados, the military has routinely assisted civil authorities. What is the basis for the use of active duty, National Guard or reserve military forces?

The Army has provided assistance to the country for many years through actions taken by local commanders or through congressionally mandated support. Local commanders frequently assist the community with public works, education, and training.⁷ Large-scale assistance, such as disaster response, is congressionally mandated. One of the earliest examples of congressionally mandated support occurred during the final year of the Civil War. Army officers provided relief to freed slaves and poor white people through the Freedman Bureau.⁸ Since the Civil War, Congress enacted broad ranging legislation authorizing use of the military to support flood prevention, disaster response, and response to weapons of mass destruction.⁹

Federal Laws

Several Federal Laws define the disaster response environment. Some laws are permissive allowing the use of federal troops, while others such as *Posse Comitatus Act* are restrictive. *The Stafford Act*, *The Economy Act* and the *Defense Emergency Response Fund* are permissive laws allowing the use of military forces, use of military equipment and the

reimbursement of supplies and services in support of federal agencies. Each of these regulations affects either manning, resourcing or funding for the use of military forces and equipment.

Flood prevention and disaster response legislation, known as *The Stafford Act*, define today's military role in a federal response after a disaster. The history of *The Stafford Act* begins with Congressional passage of *The Disaster Relief Act of 1974*.¹⁰ It formally established today's Presidential disaster declarations process and gave the president authority to direct available federal resources in support of state emergency response. His authority to direct resources included:

- Use or lend with or without compensation, their equipment, supplies, facilities, personnel, and other resources.
- Distribute or render, through the American National Red Cross, the Salvation Army, The Mennonite Disaster Service, and other relief and disaster assistance organizations, medicine, food, and other consumable supplies or emergency assistance.
- Donate or lend surplus equipment and supplies.
- Perform emergency work or services essential to save lives and to protect and preserve property, public health and safety.¹¹

While this congressional act improved the President's ability to quickly fund disaster response activities, the actual support process remained confusing, complicated and uncoordinated since multiple federal agencies routinely became involved. These federal agencies requested the Executive Office to reorganize the federal response organization. On 19 June 1978 President Carter submitted Reorganization Plan #3 of 1978 outlining the establishment of FEMA. This reorganization merged programs from five agencies, the Departments of Defense, Commerce, Housing and Urban Development, the Federal Broadcast System and the General Services Administration, into a single agency. "FEMA was to absorb all Federal preparedness, mitigation, and response plans into a single agency thus becoming a single point of contact at the

Federal level empowered to use all existing emergency resources in response to both civil defense and disaster related emergencies."¹² Through Executive Order 12148, President Carter establishing this central point of contact for disaster response activities with the formation of the Federal Emergency Management Agency. In 1979, Congress passed Public Law (P.L.) 93-288, *The Disaster Relief Act of 1979*, in order to improve the federal Government's disaster response. In 1988, P.L. 100-707 amended P.L. 93-288 and revised the 1974 and 1979 Relief Acts. Together these revisions were named the *Robert T. Stafford Disaster Relief and Emergency Assistance Act* and are now referred to as *The Stafford Act*. *The Stafford Act* "provides the authority for the Federal Government to respond to disasters and emergencies to save lives and protect public health, safety, and property."¹³ These congressional actions formalized the process for employing federal resources after a presidential declared disaster.

FEMA further organized support from federal agencies by functional area in order to establish a chain of responsibility and method of coordinating the efforts of numerous federal agencies. Twelve categories or emergency functional areas were established. Each was assigned a primary or lead agency to coordinate the activities within each emergency support function (ESF) area. The twelve emergency support functions (ESFs) are: transportation, communications, public works & engineering, firefighting, information and planning, mass care, resource support, health and medical services, urban search and rescue, hazardous materials, food and energy.¹⁴ See Figure 1-1 for lead agency assignments. Additionally each ESF is assigned supporting agencies that coordinate and report their activities to the lead agency. The U.S. Army Corps of Engineers, Department of Defense is the lead agency for public works and engineering. In the other eleven ESFs, DoD is a supporting agency.

ESF	ESF Title:	Lead Agency:
1	Transportation	Department of Transportation
2	Communication	National Communications System
3	Public Works	U.S. Army Corps of Engineers, DoD
4	Fire Fighting	Forest Service, Department of Agriculture
5	Information and Planning	Federal Emergency Management Agency
6	Mass Care	American Red Cross
7	Resource Support	General Services Administration
8	Health and Medical Services	Department of Health and Human Services
9	Urban Search and Rescue	Federal Emergency Management Agency
10	Hazardous Materials	Environmental Protection Agency
11	Food	Food and Nutrition Service, Dept. of Agriculture
12	Energy	Department of Energy

Figure 1-1 Emergency Support Functions and Lead Agency Assignments

See Appendix A for a description of each ESF and a matrix that displays both lead and supporting agencies. The supporting role assigned to DoD is the key command and control concern faced by military forces found in the DoD – FEMA and DoD - federal agency relationships supporting disaster response activities.

When the President of the United States declares an area a major disaster, federal resources are made available through *The Stafford Act*. FEMA authorizes the use of Federal resources through a funding and authorization process known as assignment of FEMA missions. A DoD officer, usually a Colonel or above, is assigned by the President as the Defense Coordinating Officer (DCO). He coordinates the use of DoD resources when requested by a FEMA mission assignment.¹⁵ While *The Stafford Act* authorized the use of DoD assets and the assignment of the DCO, DoD Directive 3025 established the DCO's staff and command and control known as the Defense Coordination Element (DCE). The details and the operation of the DCE are addressed in a later discussion within this chapter.

After addressing manpower and organizational structure, the federal government realized that federal agencies would not voluntarily expend budgeted resources without some accounting

or reimbursement. Congress addressed this matter through *The Economy Act (Section 1535, Title 31 United States Code)*. Basically, this act authorizes federal agencies to provide supplies and services to each other, and mandates cost reimbursement for those services and materials. While *The Economy Act* authorized reimbursement for federal agency-provided services, the Department of Defense required special appropriations approval to fund their activities. Congressional approval was included in the *1990 DoD Appropriations Act*.

When Congress approved the *DoD Appropriations Act of 1990*, also known as the *Defense Emergency Response Fund*, it set aside funding for military support to civil authorities during natural or manmade disasters.¹⁶ Funding was established to reimburse DoD for supplies and services requested by federal agencies during disaster response. The legislation further extended the requirement for reimbursement by state and local governments to DoD for services, equipment and supplies provided to them. Lastly, the appropriations act provided the Secretary of Defense (SECDEF) approval authority for request of DoD support. The SECDEF's ability to authorize support provides single DoD tasking authority and establishes mission accountability; a similar arrangement is authorized in DoD Directive 3025, which establishes the Defense Coordination Officer (DCO) and his staff.

The Stafford Act, Economy Act, and the *Defense Emergency Response Fund* established the permissive environment for the cooperation and use of DoD assets in support of military support operations. Congress likewise established laws that restrict or limit the use of military forces. *Title 10, Posse Comitatus Act*,¹⁷ and *Insurrection Act*¹⁸ are the most important laws affecting planners involved in disaster response.

Title 10 U.S Code contains many sections that affect the use of military forces. One area of military support to civil authorities affected by *Title 10* is the activation and employment of

reserve forces. Three sections of *Title 10* affect reserve forces: *Section 12301* - "15 day rule", *Section 12302* - "national emergency" and *Section 12304* "WMD response." *Section 12301* authorizes the SECDEF to order members of reserve components to fifteen days of active duty per year without their soldier's consent. It also authorizes a reserve soldier to volunteer to serve on active duty for any length of time. In times of national emergency as declared by the President, reserve forces can be recalled and placed on active duty status. *Section 12304*, however, restricts the use of reserves for domestic support by stating: "No reserve units or members may be ordered to active duty for a disaster, accident, or catastrophe except for response to WMD incidents."¹⁹ Taken together, these three sections restrict the use of reserve forces unless they are performing their annual 15 days of active duty or in a federal response to a weapon of mass destruction or national emergency.²⁰ National Guard units recalled for state duty under The Adjutant General of the State are exempt from these sections of *Title 10*. These three sections of *Title 10* do not apply to National Guard units and troops unless they are federalized. Federalized Guard soldiers follow the same laws and regulations as active duty soldiers; during active duty *Title 10* and *Posse Comitatus* apply.

Posse Comitatus is the second restrictive law that has a direct impact on military support to civil authorities. "*The Posse Comitatus Act of 1878* severely restricts the use of federal forces to enforce public law."²¹ This Act was implemented to protect the rights of American citizens, and places law enforcement responsibilities upon local authorities. Reserve, and National Guard forces recalled to active duty are considered federal forces and must comply with all of the provisions of *Posse Comitatus*. Planners considering the use of Reserves or National Guard must consider the affect of *Posse Comitatus* before these forces are federalized.

The final restrictive legislation affecting disaster response actions is the provision of *Title 10* applicable to insurrection. *Section 331-35 of Title 10 U.S. Code* allows the use of military forces to quell disturbances, enforce federal laws, guarantee civil rights or enforce court orders and to protect federal property.²² Before employing military force, the President must issue a Presidential proclamation to disburse the insurgents, and then he must issue an Executive Order to the Attorney General and the SECDEF directing the use of military forces. Examples of the use of military force have ranged from the Whiskey Rebellion in 1794 to the Los Angeles riots in 1992. Only in worst case disaster situations would this form of military action every be required. Local law enforcement is the responsibility of the state and local government.

Federal laws define the domestic support operational environment under which DoD conducts military support to civil authorities. *The Stafford Act* codified the formation of FEMA and its organizational structure including DoD's supporting role. Resourcing and appropriation legislation provided reimbursement to federal agencies providing assistance to local, state or other federal agencies. Lastly restrictive laws were implemented to ensure protection of citizens' rights, limit the use of active duty and reserve forces to national emergencies, and to place the responsibility for public law enforcement upon state and local government. Military directives further define the operational environment of the defense coordination element.

Department of Defense Roles and Responsibilities

DoD Directive 3025, military support to civil authorities, establishes roles and responsibilities for the Department of Defense in domestic support operations. First and foremost, SECDEF has designated the Secretary of the Army as the DoD Executive agent for military support to civil authorities (MSCA). In his capacity as DoD Executive agent, he is

responsible for developing guidance, and plans for disaster response.²³ To assist him in his duties, the Secretary of the Army appoints a general officer as the Director of Military Support (DOMS); the DoD primary contact for all federal departments. The DOMS and his supporting joint staff ensure the planning, coordination and execution of many domestic support operations.²⁴ DOMS also coordinates use of troops from the unified or specified commands with the Chairman, Joints Chiefs of Staff (CJCS). DOMS, the Secretary of the Army and Commander-in-Chief, Forces Command (CINCFOR) prepare their staffs for domestic support operations year round.

To coordinate, command, and control military forces in a major disaster area, Army colonels are selected as Defense Coordinating Officers. Within the forty-eight contiguous states First Army or Fifth Army submit their DCO recommendation to CINCFOR for approval. For disasters in US territories in the Caribbean, CINCSOUTH appoints the DCO. CINCPAC appoints the DCO for Hawaii and U.S. territories in the Pacific. These colonels are normally assigned to the FORSCOM staff and the Training Support Brigades. Training Support Brigades provide training personnel and expertise to the National Guard. This close relationship with the National Guard and the communities in which they train provides familiarity for the officers and NCOs that conduct Defense Coordination Element duties.

Defense Coordinating Officer

To prepare for the disaster response operations, colonels assigned to the training support brigade are selected to attend FEMA and FORSCOM defense coordinating officer training. A formal certification process includes training at FEMA headquarters located at Barryville, Virginia and FORSCOM sponsored response exercises and refresher training. A two-week

program of instruction at FEMA prepares the officers for appointment as the Defense Coordinating Officer. This training includes the legal basis for military support for domestic support operations, FEMA, emergency response functions, and the Federal Response Plan, including disaster response, and weapons of mass destruction.²⁵ Training conducted at FORSCOM over a one week period reviews the FEMA course material and conducts practical exercises. These response exercises provide realistic scenarios for new DCOs to hone their domestic response skills before appointment. After completing their training, these officers are available for appointment, and are placed on a short notice recall plan so that certified personnel are immediately available to the CINC twenty four hours a day, seven days a week, year round.

During disaster response operations, the defense coordinating officer is responsible to his CINC, the DOMS, and the federal coordinating officer. He is usually collocated with the federal coordinating officer near the disaster site. His responsibilities include coordination of FEMA mission assignments requiring military support, and the operational control of all military forces deployed to support the federal effort.²⁶ When a disaster covers a large area crossing FEMA regions, a separate DCO is appointed for each FCO. During Hurricane Andrew, the amount of damage was so widespread and devastating that the State of Florida required extensive assistance. In this situation, a Joint Task force headquarters was deployed for operational control of the numerous military forces in and around Homestead, FL. The DCO and his staff worked for the Joint Task Force Commander as a special staff, coordinating the requests for assistance from FEMA. When a joint task force headquarters is established, the DCO and his staff remain the single point of contact for military support. The commander, JTF becomes responsible for operational control of all deployed forces.

During disaster response operations, a staff known as the defense coordination element supports the defense coordinating officer. Organization of this staff is not specified in FM 100-19, *Domestic Support Operations*, however the traditional staff functions (personnel, intelligence, operations, logistics, transportation and resource management) are required. Since MSCA activities support other agencies, the defense coordinating officer must ensure he deploys liaison teams to work with each emergency support function. These liaison teams typically include officers or non-commissioned officers with engineer, transportation, quartermaster and medical experience. In every disaster, the defense coordinating officer will tailor his staff to anticipated mission requirements.

Spectrum of Military Operations

What are the training and organizational implications of a broader Army disaster role? At least two oversimplified approaches, at the ends of the spectrum of possible responses, can be taken [with regard] to Army support to peacetime missions: "Come as you are" and "come only if fully prepared."²⁷

John Schrader's comments found in the Rand study, *The Army's Role in Domestic Disaster Support*, clearly articulate the two extremes found in disaster response operations. The first extreme, "come as you are," refers to crisis response, while the second, "come only if fully prepared," describes situations where a disaster is forecasted (hurricanes, floods, forest fires). Preparing for disaster response involves the legal process required for the deployment of active forces. "Laws recognize that the National Guard, while in state status, has primary responsibility for providing initial support when military assistance is required. The Army's primary mission remains to defend the United States and its interests. It is the Army's combat readiness that enables it to accomplish domestic support operations."²⁸ National Guard units routinely provide

disaster response support within their own states. Their experience and familiarity with the key supported agencies allows them to prepare for, and provide, timely support before during, and after a natural disaster. The National Guard's experience conducting disaster response and hometown preparedness allows it to be fully prepared to respond. Active military forces, on the other hand, are deployed after a major disaster has been declared and appear as "come as you are" forces.

By law, active duty forces, are not deployed to a disaster site until a Presidential declaration has been made. During the hours preceding a foreseeable disaster, DOMS and CINCFOR may alert and prepare forces to respond as necessary. These preparations are conducted at the unit's own expense since a disaster declaration has not been made by the President. To observers not familiar with the military, the very process of alerting and deploying that active duty support is seen as "come as you are." What most observers do not realize is that military forces are ideally suited to provide "come as you are" support. Military occupational specialties such as engineers, transportation, quartermaster, medical service corps and officers trained in staff operations facilitate the rapid deploy of teams of specially trained soldiers. Their combat training prepares them for crisis response planning and execution. Secondly, the military's vehicles and equipment are designed to operate in an austere environments; frequently the type equipment necessary in a disaster area. Thirdly, soldiers are well disciplined and organized in a manner that supports orderly command and control in an environment often immersed in chaos. Thus active duty forces are ideally suited for crisis response. In light of these two extremes – the National Guards' first responder role and active duty forces follow-on support role, what military operations are active duty military forces prepared to conduct in support of domestic disaster response?

U.S. Public Law 93-288, *The Disaster Relief Act of 1974* (22 May 1974) clearly defines the federal government's range of operations.

The performance of emergency works or services includes, but is not limited to search and rescue, emergency medical care, emergency mass care, emergency shelter, and; provisions of food, water, medicine, and other essential needs, including movement of supplies or persons; clearance of roads and construction of temporary bridges necessary to perform emergency tasks and essential services; provisions of temporary facilities for schools and other essential community services; demolition of unsafe structures that endanger the public; warning of further risks and hazards; public information and assistance on health and safety measures; technical advice to State and local governments on disaster management and control; education of immediate threats to life, property and public health and safety.²⁹

Based upon this citation from public law, the military could expect to provide manpower and equipment to support each of the twelve emergency support functions: transportation, communications, public works & engineering, firefighting, information and planning, mass care, resource support, health and medical services, urban search and rescue, hazardous materials, food and energy.³⁰ The most likely requirements that the military planner should expect are: transportation support for the movement of relief supplies (food, water, clothing, and fuel) within disaster area; rotary wing transportation for aerial observations and emergency evacuation; temporary services such as potable water supplies, power generation and assistance with restoration of power; shelter and emergency medical support. Military support for these tasks must be requested by the state through FEMA using a process known as a Request for Assistance (RFA). A closer look at the traditional requests for military support is the focus of chapter two.

CHAPTER 2: DCE SUPPORTED DOMESTIC DISASTER RESPONSE ACTIVITIES

Based upon the Federal Response Plan and DoD Directive 3025, the military is required to support FEMA during a Presidential declared disaster. This chapter reviews two of the most expensive disasters in recent history to identify the emergency response tasks that each required: Hurricane Andrew in Florida (1991) and Hurricane Marilyn in the U.S. Virgin Islands (1995).³¹ From the discussion of each hurricane, this monograph identifies the common tasks the DCO and his staff can expect to execute when supporting FEMA. The resulting task list reveals the expected scope of military support during domestic disaster response operations.

Hurricane Andrew (1991)

In 1991, just a short four years after passage of *The Stafford Act*, FEMA and the federal response plan was put to the test. Several days before the landfall, on 24 August 1992, of Hurricane Andrew, the military began preparing a disaster response. Expecting to support implementation of the Federal Response Plan, the military implemented portions of DoD Directive 3025.1 (draft) and the Second U.S. Army Military Assistance to Civil Authorities Plan in preparation for the hurricane.³² MG John Heldstab, DOMS, and his staff tracked the storm as it blew west from the West Africa coast line. Based upon weather data from Hurricane Hugo, the National Weather predicted landfall somewhere between southern Florida and South Carolina. DOMS began prepositioning materials within airlift distance of the target area.³³

The Second Army Commander took the next step to prepare for the hurricane's landfall. Since the hurricane was expected to cross the Second Army geographic area of responsibility, he appointed a DCO in accordance with a CINCFOR tasking. The DCO and his Emergency

Response Team – Advance (ERT-A) deployed to the Florida State Emergency Operations Center in Tallahassee, Florida on 23 August 1992. The ERT-A deployed to the Federal Coordinating Officer's (FCO) location to begin coordinating with the FCO and the emergency support function representatives. From the 23rd to the 24th of August, the staffs waited for the arrival of Hurricane Andrew.

On 24 August 1992, the hurricane tore through South Florida with winds up to 145 miles per hour, gusting to 175 miles per hour. A record storm surge pushed across the Florida Everglades and Biscayne Bay.³⁴ In its wake Hurricane Andrew left 40 people dead and 1,000 square miles of South Florida damaged. The property toll exceeded 28,000 homes destroyed and another 107,000 damaged. Adding to these personal losses, more than 80,000 businesses were either damaged or destroyed. More than 1.4 million customers lost power. Telephone service for 150,000 people was interrupted or destroyed. Roads were blocked, homes were so damaged they were uninhabitable and the majority of water sources were non-potable. Many federal agencies were required during the initial disaster response.³⁵

Even though the damage was widespread, and FEMA and DoD staffs were prepared to respond, the federal government could not respond until the state requested support from the Federal Government. Florida's Governor initiated the required state actions before requesting support. After activating the Florida National Guard,³⁶ and conducting a preliminary assessment of the disaster area with FEMA, Governor Chiles determined the damage exceeded the state's capacity to respond and requested federal assistance. That same day, President Bush declared Dade, Monroe, and Howard counties designated disaster areas eligible for federal assistance. With this Presidential declaration, the federal resources authorized by *The Stafford Act*, including military support, could be deployed to South Florida.

During the initial days of disaster response, the people of Florida perceived that federal efforts were sluggish; arriving too late with too few supplies. Kate Hale's comments as Director of Dade County Office of Emergency Management during a press demonstrated the frustration felt by the citizens of Dade County. She inquired, "Where the hell is the cavalry in this one? We need food. We need water. For God's Sake, where are they?"³⁷ Upon hearing this, President Bush established a Presidential Task Force headed by the Secretary of Transportation to assist FEMA. He also ordered increased DoD participation. The "cavalry" was about to arrive in the affected counties as Joint Task Force Andrew formed 28 August, just four days after the hurricane's landfall.

JTF Andrew was commanded by LTG Ebbeson and included elements of XVIII Airborne Corps, 10th Mountain Division, a Special Purpose Marine air-ground task force, the U.S. Air Force, U.S. Army Material Command, and Canada. This JTF composed of almost 24,000 soldiers, sailors, airmen, and marines, comprised the largest response of any federal organization during disaster response operations.³⁸ The DCO and his support staff operated as a special staff to the JTF commander. This organizational relationship preserved the supporting relationship between the DCO and FEMA. The JTF relationship allowed the DCO to focus on the immense coordination requirements associated with this disaster, while the JTF commander and his staff focused on operational control and execution of the assigned missions. The JTF's mission statement was: "Provide humanitarian support by establishing field feeding sites, storage / distribution warehousing, cargo transfer operations, local / line haul transportation operations and other logistical support to the local population."³⁹ This mission answered the "call for the cavalry" requested by Kate Hale.⁴⁰

During the next 39 days JTF Andrew performed a variety of missions during its three-phased operation. The JTF divided the disaster response into three phases: relief, recovery and reconstitution. The first and most critical phase required the rapid distribution of basic life support materials and services to the victims of the hurricane. These included water, food, shelter medical services and supplies. The second phase shifted the emphasis from supporting the victims of the hurricane to directly supporting Federal, state and local authorities. The last phase involved the continuation of services by non-DoD agencies and transition to management by the local, state and federal government.

While developing endstates for each phase of the operation, the staff identified nine areas of military support: power generation, debris removal, sanitation, food distribution, potable water, shelter, medical, schools and security. These nine areas of support correspond to ESF #1: Transportation, ESF #3: Public Works and Engineering, ESF #6 Mass Care, ESF #7: Resource Support, ESF #8: Health and Medical Services, ESF #11 Food and ESF #12 Energy. The only area not covered by FEMA emergency support functions was security. During the relief phase, JTF Andrew became the *defacto* lead agency for ESFs 1, 6, 8, 11, and 12 because DoD deployed the necessary troops and equipment into the disaster area before FEMA contracted resources were available.⁴¹ Task Force Andrew AARs indicate that, during the first few days of relief operations, duplication of effort by DoD, non-profit organizations and federal, state, and local governments complicated the distribution of relief materials.⁴²

FEMA, as the lead agency, provided DoD more than ninety taskings for relief and recovery assistance to south Florida residents. JTF Andrew arranged the taskings into missions and organized them into the following categories:

- Conduct damage assessment
- Provide aviation support
- Establish emergency feeding sites
- Establish life support center
- Provide electrical power
- Operate humanitarian depot system
- Remove debris
- Provide tentage
- Establish laundry facilities
- School repair
- Medical support
- General equipment support
- Provide personnel augmentation

The original nine areas of expected support identified during JTF mission analysis grew to thirteen with the addition of: providing aviation support, conduct damage assessment, provide general equipment support, establish laundry facilities, and establish life support centers. One task - providing security - involved *Posse Comitatus* and was retained as a local responsibility. Around military operations, JTF soldiers providing site security while local authorities handled the community's security requirements in accordance with *Posse Comitatus*.

Additional internal support requirements were discovered while reporting lessons learned during Hurricane Andrew. First, when a disaster involves a Joint Task Force headquarters, the assignment of a supporting division headquarters to plan and execute support missions is critical to the success of the operations. Division headquarters have sufficient staff personnel to plan and coordinate activities that supporting units do not have. Secondly, liaisons are required at the local government level and at each of the twelve emergency support function cells at the Field Disaster Office to coordinate taskings.⁴³ ESF liaisons are essential in DCE operations to reduce

duplication of effort by federal, state and local agencies.⁴⁴ Lastly, Hurricane Andrew identified the need for in-depth information in order to provide disaster relief to the community.

Information requirements, such as names and phone numbers of key officials, locations of potential support sites, key water, fire, and police locations, are examples of the types of information required during the initial hours of disaster response. The intelligence section (S/G-2) can collect the necessary information during the deployment planning process and after it is deployed to support DCE or JTF operations.⁴⁵ These three internal support requirements, when supported, enable coordinated planning, reduce duplication of work and provide valuable information to the DCE and the JTF staff.

Taken together, the original planning endstates, the FEMA tasking categories and the internal support requirements define the potential tasks supported by future DCE planners. Since Hurricane Andrew occurred before publication of FM 100-19, *Domestic Support Operations*, and *DoD Directive 3025 (draft)* in final form, a second major hurricane, Hurricane Marilyn will be examined to determine if any additional tasks should be planned and coordinated by the DCE.

Hurricane Marilyn (1995)

Hurricane Marilyn occurred during the summer of 1995; a year that saw fourteen named tropical storms or hurricanes. In preparation of the hurricane season, Headquarters, First U.S. Army identified potential defense coordinating officers and staffs throughout the First Army geographic area. Readiness Group headquarters were selected to conduct DCO – DCE training in preparation for the upcoming hurricane season. The first step of the training required sending the Readiness Group Commander, COL Stevens, and his operations officer, LTC West, to the DCO course at FEMA Headquarters in Barryville, Maryland. Upon their return from the course,

Readiness Group Redstone began formal planning and training for the conduct of DCE operations. LTC West and members of the combat arms division of Readiness Group Redstone wrote a DCE standard operating procedure (SOP). MAJ Richard Furney headed the SOP writing team since he had experience with Hurricane Andrew in 1992. His experience as an artillery battalion operations officer during that deployment ensured that lessons learned during Hurricane Andrew were implemented into the Redstone Readiness Group DCE SOP.

Just weeks after conducting DCE classroom training and practical exercises with regional non-governmental agencies, the emergency response team advance (ERT-A) was notified by First Army to prepare for deployment to either St. Thomas, U.S. Virgin Islands (U.S.V.I.) or Puerto Rico prior to anticipated landfall of Hurricane Luis on 5 September 1995. The ERT-A deployed by commercial aircraft from Atlanta, Georgia to Charlotte Amalie, St. Thomas on 4 September. Arriving before the storm, the ERT-A established a temporary operations center at the Virgin Island's Territorial Emergency Management Agency (VITEMA) operation center.⁴⁶ Using laptop computers and portable power, ERT-A personnel tracked the storm until landfall. Hurricane Marilyn was measured at a category 4 on the Saffir-Simpson Hurricane Scale as it approached the Leeward Island and inflicted more than 1.2 billion dollars damage.⁴⁷ As it approached, the National Hurricane Center forecast the storm to be a category 3 storm with winds of 120 miles per hour. Instead the storm passed north of St. Thomas on 6 September inflicting the island with winds of 65 to 95 miles per hours. Storm damage in the Virgin Islands was minimal and did not require federal assistance. Therefore, the ERT-A for both the DCE and the disaster field office (DFO- The DFO is where the federal coordination officer and his ESF staff operate) prepared for redeployment.

Since four additional tropical storms were tracking from the west coast of Africa towards the Caribbean, the advance parties reconnoitered the island's facilities. Prior to redeployment, the DCE and FEMA ERT-As conducted joint face-to-face coordination with island officials, tested communication equipment with First Army Headquarters and FEMA, and reconnoitered the island to identify the location of critical transportation nodes, sources for water, fuel, food, and emergency shelter locations. This joint coordination effort provided critical information that was used seven days later, when Hurricane Marilyn struck the island.

One week later, 15 September, the ERT -A and support personnel from Headquarters, First Army deployed to the U.S. Virgin Islands again. Unlike the last trip to St. Thomas, its deployment order arrived too late for the ERT-A to fly directly to St. Thomas. All flights to the Virgin islands were either diverted to Puerto Rico or canceled due to worsening storm conditions. The ERT-A would not arrive on St. Thomas until after the hurricane passed. To avoid damage to the military aircraft (C23-Sherpa) that flew the ERT-A to U.S.V.I., the team flew west to Mayaguez, Puerto Rico and spent the night at a local hotel. By mid afternoon, the winds on the Virgin Island reached 65 miles per hour. The north edge of the hurricane struck U.S.V.I. later that evening.

The storm struck the coast with 130 plus mile per hour winds, which pushed a 8-foot wall of water through the tropical harbor known as Charlotte Amalie Bay.⁴⁸ This storm surge lifted pleasure craft, 40-foot yachts and even the US Coast Guard cutter out of their moorings in the harbor and crashed them upon the streets and sea walls lining the harbor. The winds and torrential rains tore through the harbor community destroying homes, public buildings and business leaving behind a debris-strewn landscape.⁴⁹ In less than six hours, this hurricane inflicted more than 500 million dollars of damage upon this tropical paradise.⁵⁰

During the early morning hours of 16 September, just 6 hours after the eye of the hurricane passed over the Virgin Islands, the DCE ERT-A landed at the St. Thomas' (STT) small international airport with 13 people to conduct initial assessments and establish the defense coordination element to support the FEMA ERT-A upon its arrival. The STT ERT-A arrived at STT airport 16 0900 SEP 95⁵¹ by C23 (Sherpa), which were flown by VI ARNG pilots. During the inbound flight, the DCO and his staff conducted an aerial overflight of St. Thomas and St. Johns. Initial damage assessments were beyond belief. The members of the Virgin Island Territorial Emergency Management agency, the DCE ERT-A and FEMA ERT were amazed as they surveyed the damage during the morning hours of September 16 and 17. Col Steven's initial assessment forwarded to Headquarters First Army at 1600 on September 16 read:

The situation here is serious. [It is] an island without public AM/FM radio communication, limited phone service, no power, and extensive damage to buildings and public facilities. As earlier stated, the EOC is suffering 'shock' at the devastation here on STT. As of yet, the STT [VITEMA] EOC is not fully operational and not receiving regular reports from ESFs. Negative status on shelter status, food, water, etc....⁵²

By late afternoon, FEMA's ERT arrived on St. Thomas. Damage discovered was so extensive that later that day, September 16, the President declared the U.S.V.I. a major disaster area eligible for federal assistance. Military support was deployed on St. Thomas, St. Croix, and St. Johns islands. During the next 38 days the DCE was operational.⁵³

During Operation Hurricane Marilyn Relief, 16 September to 24 October 1995, Colonel Billy W. Stevens commanded the Defense Coordination Element (DCE). Under his direction, the DCE supported FEMA and the Federal Coordinating Officer. During the DCE operations, COL Stevens had operational control of Army, Navy, and Air force personnel. At the peak of the operation, 1 October 1995, 1,247 soldiers were deployed in support of the response mission. A total of 1,400 soldiers were deployed to support the relief effort. Mission support actions

taken included setting up a Combat Support Hospital (CSH), providing food, water and relief supply distribution, assisting the Coast Guard in restoring the island's navigation channel, and removing debris from many locations throughout the island.

FEMA issued a total of ninety-five requests for mission assistance (RFA) to the defense coordination element.⁵⁴ Of these, sixteen were canceled as duplicate requests for assistance by more than one ESF, or as requests for DoD options for comparison with contractor provided services. An RFA should specify the mission to be accomplished, not the equipment an ESF desires. About half of the sixteen tasks canceled by the Hurricane Marilyn DCE were requests for specific pieces of equipment. One glaring example of an ESF requesting equipment instead of defining the mission was a request for the 550-man force provider set instead of shelter for one hundred families.⁵⁵ The DCE conducted the analysis and determined that force provider would not fit on the area selected for the temporary shelter, and that the cost to FEMA and USVI was greater than shipping in temporary manufactured homes from Puerto Rico. The seventy-nine tasks, which were completed, belong to one of the ten categories below:

- Conduct damage assessment
- Communication Support (first 48 hours)
- Non-combatant evacuation
- Provide aviation support
- School repair
- Water Purification
- Medical support
- Provide electrical power
- Debris removal
- Clear navigational Channel

The Hurricane Marilyn DCE required fewer categories of support than Hurricane Andrew due to FEMA's experience and ability to coordinate and provide contract services in a timely manner. Military resources were deployed only when civilian contract services were not available, or when specialized equipment, such as a combat support hospital and Reverse Osmosis Water

Purification Unit (ROWPU), were required on short notice for limited duration missions. Contractors handle even more disaster response functions when a disaster occurs in the continental U.S. because they are readily available from areas not affected by the disaster.

Key Doctrinal Tools

From DoD experiences during Hurricane Andrew and Marilyn, a consolidated list of routine DoD support requirements for disaster response emerges. During the comparison of FEMA requests for assistance or RFA, the focus has remained on requirements not the equipment the state may request. The following tasks are routinely identified for support through the DCE:

- Conduct damage assessment
- Communication support (first 48 hours)
- Non-combatant evacuation
- Water purification and transport
- Provide aviation support
- Provide electrical power
- Fixed wing airlift support
- Medical support
- School repair
- Clear navigational channel
- Provide engineer support (temporary bridging)

Planners can use this list to prepare contingency plans for deployment of assets to meet these requirements in a timely manner. The consolidated list of DoD tasks identifies the tactical tasks that the DCE coordinates. Two additional internal tasks, providing liaison to ESFs and supported agencies, and providing operational control of military forces, serve to enable effective military operations during domestic disaster response activities. Experiences from both hurricane relief operations also concluded that these operations are conducted in a joint or interagency environment.⁵⁶ Knowing what recurring tasks have occurred in two of the most

costly hurricanes in recent history, it is time to analyze joint and Army doctrine to determine whether it provides operational principles and a battlefield framework to plan and execute these missions.

CHAPTER 3: ANALYSIS OF DOCTRINE

Major disasters cannot be handled without adequate preparation. Forces providing relief at the scene are too busy to explain how state or national resources should have been organized. There is not enough time to reorganize and conduct training at the site of the disaster. Potential helpers will be ill prepared if untrained. Effective response requires a commitment of time and resources before a disaster occurs, which in turn requires a commitment by Army leadership to the disaster relief mission within the emerging vision of the Army of the future. This commitment will ensure that individuals and units receive adequate training, resources and recognition for their disaster response role.⁵⁷

The above quote addresses the essence of emergency response preparedness. Not only do men, materials and equipment have to be prepared, but also doctrine and training must prepare the leaders and staff of the DCE. Soldiers are training to conduct their tactical or military occupational skills. Soldiers that drive trucks, move supplies, purify water, fly aircraft, and conduct engineering projects do these tasks on a regular basis. The DCE and staff members of the DCE do not routinely conduct training in a joint and interagency role supporting other Federal agencies. This chapter determines whether the Army provides the DCO and his staff the doctrinal tools necessary to accomplish the DCE mission.

Planning military operations requires doctrinal tools at two levels: operational and tactical. Operational level planning focuses on when, where and for what purpose forces will be deployed.⁵⁸ This definition, found in Joint Pub 3-0, *Doctrine for Joint Operations*, is primarily written for wartime military operations. However it also applies to military operations other than

war. Commanders use planning principles and a battlefield framework to frame various aspects of a problem set and determine how they can best provide trained and equipped military forces to support response operations. These planning principles and the battlefield framework are the DCO's operational level doctrinal tools. Subject matter experts on the DCE staff and supporting commanders, who plan and execute missions, require a different set of doctrinal tools. Their tools focus at the tactical level and include the military decision making process and detailed tactics, techniques and procedures that assist them in executing their missions. This chapter examines current joint and Army doctrine to determine whether it provides the "tools" needed by the DCO / DCE to plan and coordinate the actions of military units in support of Domestic Disaster Response Activities.

Operational Tools – Joint Doctrine

Hurricanes Andrew and Marilyn demonstrated that domestic support operations are both joint and interagency operations, requiring a DCO to seek out joint doctrine addressing domestic support principles. Joint Pub 3-0, *Doctrine for Joint Operations*, focuses on war fighting with a single chapter devoted to defining military operations other than war (MOOTW).⁵⁹ Joint Pub 3-07, *Military Operations Other Than War*, focuses its discussion on MOOTW occurring on foreign soil with only a single paragraph referencing Hurricane Andrew under the category of military support to civil authorities.⁶⁰ A detailed look at both of these joint manuals begins with Joint Pub 3-0 to determine if joint publications provide principles, planning considerations and a battlefield framework for planning disaster response operations.

Does joint doctrine provide any principles for planning disaster response operations?
Joint Pub 3-0, *Doctrine for Joint Operations*, focuses on war fighting and the principles of war.

It provides the DCO with the fundamentals of joint operations. Joint Pub 3-0 also defines military operations other than war and its associated principles.⁶¹ According to Joint Pub 3-0, "Military operations other than war encompass a wide range of activities where the military instrument of national power is used for purposes other than the large scale conflicts associated with war."⁶² While the principles of war (objective, offensive, mass, economy of force, maneuver, unity of command, surprise, and simplicity) generally apply, political considerations and the nature of MOOTW require additional principles.

The six principles for the conduct of operations other than war are: objective, unity of effort, legitimacy, perseverance, restraint, and security. These principles are found in Joint Pub 3-07, and Army FM 100-9.⁶³ The definition of each principle is:

- Objective: Every military mission is directed toward a clearly defined, decisive, and obtainable objective.
- Unity of effort: Seek unity of effort in every operation.
- Security: Never permit hostile factions.
- Restraint: Apply appropriate military capability prudently.
- Perseverance: Prepare for the measured, protracted application of military capability in support of strategic aims.
- Legitimacy: Committed forces must sustain the legitimacy of the operation and host government, where applicable.

During Hurricane Marilyn, these principles were applied during mission analysis and planning for deployment of military forces. The principle of objective required that each RFA be defined as a mission with a clearly defined endstate, instead of allowing ESFs to request people and equipment for an undetermined length of time. Unity of effort was a constant concern for the military; each RFA was checked to ensure that duplicate resources were not applied against disaster response tasks. Security operations for Hurricane Marilyn were limited to military encampments and working sites; local authorities had responsibility for law enforcement and security. First U.S. Army demonstrated restraint and legitimacy by deploying military forces to

USVI without weapons to provide support in order to avoid the appearance of a U.S. military invasion.⁶⁴ These examples demonstrate that Joint doctrine provides MOOTW principles to the DCO and his staff to assist his analysis and planning.

Does joint doctrine provide planning considerations for the DCO and his staff? Joint Pub 3-07 provides detailed MOOTW planning considerations in Chapter IV. While most of the manual focuses on foreign humanitarian assistance, Chapter IV provides several planning considerations that the DCO must review when conducting domestic disaster response. Unit integrity, command and control, public affairs, civil affairs, non-governmental agencies, private volunteer organizations, interagency operations, logistics, and support termination are essential domestic disaster response planning considerations contained in that chapter. But do these planning considerations address all of the critical issues involved with domestic disaster response?

Two critical considerations that Joint Pubs 3-0 and 3-07 do not specifically address are the restrictions and legal requirements involved in domestic support operations. While Joint Pub 3-0 uses JTF Andrew as an example of military support to civil authorities, it provides no specific guidance for domestic disaster response operations.⁶⁵ While Joint Pub 3-07 is dedicated to MOOTW, it does not describe *The Stafford Act* nor does it discuss the Federal Response Plan. Furthermore, the manual only mentions DoD Directive 3025, *Posse Comitatus* and *The Economy Act* without explaining the key elements of these directives and laws. Domestic disaster response, a form of military operations other than war (MOOTW),⁶⁶ operates under specific rules, laws, federal regulations and DoD Directives, which govern the actions of the DCO and supporting commanders. A MOOTW joint publication should address the significant elements contained in these laws, regulations and directives. The lack of any detail requires the DCO and

- his staff to search out non-doctrinal, non-military documents or other references to better determine the constraints or procedures under which he must operate.

Does joint doctrine provide a battlefield framework for planning disaster response? A battlefield framework should help the planner define the battle space in which he operates. Joint doctrine defines the various portions of the battlefield, and outlines the commander's estimate process as a planning framework, but these manuals (Joint Pub 3-0, 3-07, and 5-0) do not define a specific domestic disaster response framework or provide any examples of FEMA's organizational framework.

The key difference between most military operations and domestic disaster response is the "supporting role" military forces assume in relation to federal agencies. FEMA does not command or control military forces. Military activities must be coordinated through the DCO and his staff. The DCO and his staff work with the FCO to ensure RFAs support state and federal agencies in their relief efforts. FEMA, the lead agency coordinating the federal response, utilizes twelve ESFs as a planning, reporting and coordinating structure. DoD is a supporting agency in eleven of twelve ESFs. Since the ESF structure is FEMA's *defacto* planning framework, it ought to be identified in MOOTW joint doctrine. Yet, joint doctrine fails to define FEMA's ESF planning, reporting and coordinating framework.

In summary, joint doctrine provides some of the operational tools the DCO and his staff require for planning disaster response activities. Joint doctrine provides principles of joint planning, MOOTW principles and planning considerations. It does not address the critical elements of domestic disaster response contained in US Code, Presidential Directives and DoD Directives. Furthermore, joint doctrine neglects the role of FEMA and the ESF structure it uses

for planning, coordinating and reporting operations. These shortcomings require the DCO and his staff to rely on Army doctrine for these areas.

Operational Tools – Army Doctrine

Three forms of published guidance are available to the Army DCO preparing for DCE operations: DoD Directives, Army regulations and Army doctrinal manuals. The first source, DoD Directive 3025, provides the DCO a legal basis for Army military support to civil authorities. It's specific guidance must be understood by the DCO. The Director of Military Support website provides online training resources for the DCO and his staff regarding DoD Directives.⁶⁷ A second reference for the potential DCO and his staff is Army Regulation 500-60, *Disaster Relief*, August 1981. Even though it is nineteen years old, it contains references regarding assistance to American Nations Red Cross (ESF #6: Mass Care), Boise Interagency Fire Center, (ESF #4: Fire Fighting [Now called the National Interagency Fire Center]), and other federal agencies. The regulation contains specific guidance for communication support, providing supplies to other agencies, and funding and accounting requirements. Army Regulation 500-60 clearly reflects DoD policy regarding the conduct of military support to civil authorities found in DoD Directive 3025.1.⁶⁸ Together these directives and regulations define the Army operating environment. To define the Army's operational and tactical roles requires examining Army doctrine.

Army doctrine begins with FM 100-1, *The Army*. It expresses the Army's fundamental purpose, roles, responsibilities and functions, as established by the Constitution, Congress and the Department of Defense. "As the Army's cornerstone document, FM 100-1 defines the broad and enduring purposes for which the Army was established and the qualities, values, and

traditions that guide the Army in protecting and serving the Nation."⁶⁹ This capstone manual cites Hurricane Hugo as an example of military operations other than war.⁷⁰ Operational planning details are left to FM 100-5, and FM 100-19. FM 100-5, *Operations*, defines a framework for planning and conducting Army wartime operations.⁷¹ As the keystone manual, it provides operational doctrinal guidance for DCOs and their staffs. FM 100-19, *Domestic Support Operations* is the Army's sole disaster response field manual.

The current FM 100-5, dated 1993, provides fundamentals of Army operations, and includes one eight-page chapter on Operations Other Than War.⁷² FM 100-5, *Operations*, reinforces the operational concepts of battlefield organization, principles and the planning considerations found in Joint Pubs 3-0 and 3-07. Disaster response and domestic support operations are not given any more detail beyond the principles of [M]OOTW defined in the Joint Publications. Presidential Decision Directives, laws and DoD Directives regarding domestic support are not mentioned in this document.

The 2000 FM 3-0, *Operations*, now in final draft form, will soon replace 1993 FM 100-5. This new manual recognizes the full spectrum of military operations, including domestic support operations and disaster response. FM 3-0 addresses the overarching concepts of *Posse Comitatus*, DoD Directive 3025.15 (referred to as Military Assistance to Civil Authorities), and the supporting role of active duties forces to other federal agencies. This draft manual even addresses the disaster response missions identified by Hurricane Andrew and Marilyn AARs. When this manual is officially released, the DCO will be provided a better set of operational level tools for domestic support operations than those found in the Army's 1993 keystone manual.

FM 100-19, the Army's *Domestic Support Operations* doctrine, provides the DCO the details not found in Joint doctrine or FM 100-5. In the preface and introduction, its authors provide a glimpse of the detail present in this manual.

It provides general information to civilian authorities at the federal, state, and local levels involved in planning for and conducting such operations. It identifies linkages and defines relationships with the federal, state and local organizations and with other services that have roles and responsibilities in domestic support operations...
...manual provides specific guidelines and operational principles in the conduct of domestic support operations.⁷³

Contained within this manual are the references pertaining to the Army's legal basis for domestic support, as well as the constraints of *Posse Comitatus*, *Insurrection Act*, and *Title 10*. Most importantly, FM 100-19 has an entire chapter dedicated to disasters and domestic emergencies.⁷⁴ At the operational level, *Domestic Support Operations* provides the DCO the resources to deploy forces, understand FEMA coordination requirements and prepare forces for disaster response operations. What are missing from FM 100-19 are the operational level tasks and lessons learned during hurricanes, floods and fires since 1993. Example tasks identified by Hurricanes Andrew and Marilyn, as well as other disaster, should be available in doctrinal manuals for the DCO and his staff. Separate disaster specific task lists for hurricanes, tornadoes, fires, and floods provide the DCO a start point for planning. Knowing the potential tasks allows the staff to plan, train and resource forces for a specific type of disaster before deployment. FM 100-19, *Domestic Support Operations*, should be revised to reflect lessons learned, and the essential planning tasks expected during differing disaster response activities.

Joint and Army doctrine provide the DCO a snapshot of the disaster response process. Both joint MOOTW and Army domestic support doctrine lack the critical tools DCO needs to plan disaster response operations. Legal references and FEMA related procedures are missing from Joint Pub 3-07, *Joint Doctrine for Military Operations Other Than War*. During disaster

response operations the DCE operates in a joint and interagency environment. Army Regulation 500-60 directs, "Major [US Army] commands will prepare contingency plans for major disasters. Plans must be coordinated with other DoD components and with appropriate Federal, State and local authorities."⁷⁵ Disaster Response operations are chaotic, complex operations. Planning for disaster response includes identifying participating forces and training requirements from the joint community. A common legal understanding of disaster response legislation by all of the Army and supporting services is essential for joint success.⁷⁶

As DoD's Executive Agent for Military Assistance to Civil Authorities (MACA),⁷⁷ the Army is responsible for providing domestic support doctrine to disaster response forces. While FM 100-19 contains information on the legal basis for disaster response it lacks detailed disaster specific tasks and lessons learned from hurricanes, fires and floods.

Tactics, Techniques and Procedures for Domestic Disaster Response

Research for this monograph did not discover any Army TTP doctrine for domestic disaster response. The Army has a single manual that addresses fire fighting, but does not have any doctrinal manuals for hurricanes, earthquakes or floods.⁷⁸ Given this lack of any doctrinal sources for disaster response, where does the Defense Coordinating Element and supporting unit commanders derive tactics, techniques and procedures (TTPs) for the conduct of disaster response activities? Three source of tactics, techniques, and procedures are available: soldier expertise, Center for Army Lessons Learned (CALL), and the Director of Military Support website.

The first source for TTPs for any military activity is soldier expertise. As the Defense Coordination Officer assembles his staff, he should identify personnel with prior domestic

support operation experience. When COL Steven's assembled his staff for Hurricanes Luis and Marilyn, he selected his ERT-A personnel based on experience working with Federal agencies.⁷⁹ During preparations for Hurricane Marilyn, DCE staff officers identified the following potential response tasks: debris removal, communications, medical and transportation support. These tasks required technical skills possessed by engineer, signal, medical service corps, transportation and quartermaster personnel. Units possessing personnel and individual officers with these skills were scheduled in the main body for the DCE. Prior to a disaster, DCE staff officers can look at similar disasters in other areas to project likely personnel expertise required.

To assist the DCO and his staff in preparing for disaster response operations, CALL provides AARs, lessons learned booklets and information papers. Resources can be received from CALL several ways; by mail or through the Internet. Mailed materials are useful during the preparatory phases of disaster planning. The fastest and most convenient method is through Internet access.⁸⁰ CALL provides hurricane and other disaster specific lessons learned.⁸¹ Additionally, Joint Universal Lessons Learned is available through CALL and provides very specific lessons learned. In an August 1995 report on Operation Restore Hope, the authors indicated that lessons learned are frequently not used in planning and are thus relearned.⁸² Prior to deployment on DCE operations the DCO and his staff should access CALL's lessons learned database. Relearning key lessons over and over is a luxury we can ill afford.

A third source for TTPs is the Office of the Director of Military Support (DOMS). DOMS provides training materials and references on their military access only website.⁸³ The site provides DCE personnel the DoD Emergency Preparedness Course, lists containing points of contact, the DoD Resource Database, and a sample DCE standard operation procedures (SOPs).⁸⁴ All of these tools have a domestic disaster response focus.

These three TTP sources provide the Defense Coordinating Officer and his staff a multitude of tactical level tools for planning and controlling disaster response activities. For these tools to be effective, training must be conducted prior to deployment. DOMS, FEMA, First and Fifth U.S. Army conduct DCO/DCE training at least twice year. Senior leaders receive the necessary training to conduct their missions as DCO. Personnel assigned to the DCE are provided the tactical tools necessary to conduct DCE operations, but must look beyond the Army's doctrinal manual, FM 100-19, to find them. DCOs must ensure their operations officers seek out domestic disaster response experienced personnel, utilize the products and lessons learned at CALL and ensure their staff is familiar with the DOMS website. These three resources provide the DCE staff and supporting commanders tactical level planning tools for disaster response not found in Army doctrinal manuals.

CONCLUSIONS

The overall question, "Does joint and Army doctrine provide the tools necessary for the DCO and his staff to conduct DCE operations?" was examined at the operational and tactical levels of war. At the operational level, of war the question dealt with the organizing, equipping and sustaining of the forces deployed to support a disaster response operation. At the tactical level of war, this monograph dealt with the tactics, techniques and procedures the DCE staff and supporting commanders utilize in the execution of DCE missions.

At the operational level, joint doctrine, especially Joint Pub 3-07, *Joint Doctrine for Military Operations Other Than War*, does not adequately address domestic disaster response. Operational doctrine should provide tools to help the DCO plan when, where, and for what

purposes forces will be deployed.⁸⁵ Legal references and FEMA related procedures related to organizing forces are missing from joint doctrine. These legal references affect the DCO's ability to plan for and control the employment of reserve and active forces. Next, while MOOTW principles and planning considerations contained in the manual provide the DCO a rudimentary planning framework for organizing and sustaining forces, these do not match FEMA's ESF framework. FEMA uses its own list of ESFs as a planning, coordinating and reporting framework, yet no mention of this framework exists in joint doctrine. The absence of a common legal basis and FEMA's ESF framework do not prepare the DCO to conduct DCE operations.

The second source of operational guidance is contained in Army doctrinal manuals. FM 100-9, *Domestic Support Operations*, does provide the DCO a legal basis for DCE operations, planning principles, and considerations for domestic support operations. The broad category of domestic support operations does not provide the DCO sufficient examples of disaster specific doctrine to plan, coordinate and execute disaster response operations. Anticipated task lists and mission planning considerations tailored to disaster relief are two of the missing tools the DCO requires to equip, train, and sustain forces deployed to disaster response. The Army needs a disaster response field manual that addresses operational and tactical planning procedures and lessons learned from disaster response operations involving hurricanes, fires, earthquakes, and floods.

The DCO, his staff and supporting commanders also look to doctrine to find tactical references and tools necessary for planning and executing domestic disaster response missions. This monograph found that Army domestic support doctrine does not contain TTPs for the DCO, his staff or supporting commanders to conduct disaster response operations. Fortunately,

DOMS, FEMA, CALL and the two U.S. Armies have provided Internet websites with a variety of tools for the DCO, his staff and supporting commanders to use. When FM 100-19, *Domestic Support Operations*, is revised, references to these current websites must be included.

The bottom line—joint and Army doctrine does not provide all of the tools necessary for the DCO and his staff to conduct DCE operations. At the operational level the DCO or his staff must research DOD directives, disaster response legislation and lessons learned databases to ensure he understands the disaster response environment. At the tactical level the DCO, DCE and subordinate commanders, must rely on non-doctrinal sources for disaster response planning tools. This research identified three sources for disaster response information, and tools: DOMS, FEMA, and CALL.

APPENDIX A, FEMA EMERGENCY SUPPORT FUNCTIONS

This appendix provides detail information on FEMA's Emergency Support Functions (ESFs). The first section defines each ESFs in accordance with the Executive Summary of the Federal Response Plan (FRP). The second section of this appendix contains a matrix displaying the relationship between selected federal agencies and each ESF.

ESFs Defined

The FRP employs a functional approach that groups federal response assistance under 12 Emergency Support Functions (ESFs). Each ESF is headed by a primary agency. Federal response assistance is provided using some or all ESFs as necessary.

ESF #1: Transportation

Lead agency: Department of Transportation

Assists Federal agencies, State and local government entities, and voluntary organizations requiring transportation capacity to perform response missions.

ESF #2: Communications

Lead agency: National Communications System

Ensures the provision of Federal telecommunications support to Federal, State, and local response efforts.

ESF #3: Public Works and Engineering

Lead Agency: U.S. Army Corps of Engineers, Department of Defense

Provides technical advice and evaluation; engineering services; contracting for construction management, inspection, and emergency repair of water and wastewater treatment facilities; and potable water and ice, emergency power, and real estate support to assist State(s) in lifesaving and life-protecting needs, damage mitigation, and recovery activities.

ESF #4: Firefighting

Lead Agency: Forest Service, Department of Agriculture

Detects and suppresses wildland, rural, and urban fires resulting from, or occurring coincidentally with, a major disaster or emergency.

ESF #5: Information and Planning

Lead Agency: Federal Emergency Management Agency

Collects, analyzes, processes, and disseminates information about a potential or actual disaster or emergency to facilitate the activities of the Federal Government in providing assistance to affected States.

ESF #6: Mass Care

Lead Agency: American Red Cross

Coordinates Federal assistance in support of State and local efforts to meet the mass care needs of victims, including sheltering, feeding, emergency first aid, and bulk distribution of emergency relief supplies.

ESF #7: Resource Support

Lead Agency: General Services Administration

Coordinates provision of equipment, materials, supplies, and personnel to support disaster operations.

ESF #8: Health and Medical services

Lead Agency: Department of Health and Human Services

Provides coordinated Federal Assistance to supplement State and local resources in response to public health and medical care needs.

ESF #9: Urban Search and Rescue

Lead Agency: Federal Emergency Management Agency

Deploys components of the National Urban Search and Rescue Response System to provide specialized lifesaving assistance to State and local authorities, including locating, extricating, and providing initial medical treatment to victims trapped in collapsed structures.

ESF #10: Hazardous Materials

Lead Agency: Environmental Protection Agency

Provides Federal support to State and local governments in response to an actual or potential discharge and/or release of hazardous substances.

ESF #11: Food

Lead Agency: Food and Nutrition Service, Department of Agriculture

Identifies, secures, and arranges for the transportation of food assistance to affected areas requiring Federal response, and authorizes the issuance of disaster food stamps.

ESF #12: Energy

Lead Agency: Department of Energy

Helps restore the nation's energy systems following a major disaster requiring Federal assistance; and coordinates with Federal and State officials to establish priorities for repair of energy systems and to provide emergency fuel and power.

Federal Agencies FEMA ESF Relationships

ESF	1 Trans	2 Comm	3 Public Works & Eng	4 Fire fighting	5 Info / Plans	6 Mass Care	7 SPT	8 Health and Med.	9 USR	10 HAZ MAT	11 Food	12 Energy
ORG												
USDA	S	S	S	P	S	S	S	S	S	S	P	S
DOC		S	S	S	S	S	S			S		
DOD	S	S	P	S	S	S	S	S	S	S	S	S
DOEd					S							
DOE	S		S		S		S			S		P
DDHS			S		S	S	S	P	S	S	S	
DHUD						S						
DOI		S	S	S	S					S		
DOJ					S			S		S		
DOL			S				S		S	S		
DOS	S									S		S
DOT	P	S	S		S	S	S	S	S	S	S	S
TREAS					S							
VA			S		S	S	S					
AID								S	S			
ARC					S	P		S			S	
EPA			S	S	S			S	S	P	S	
FCC		S										
FEMA		S		S	P	S	S	S	P	S	S	
GSA	S	S	S		S	S	P	S	S	S		
ICC	S											
NASA					S							
NCS		P			S		S	S				
NRC					S					S		
OPM							S					
TVA	S		S									S
USPS	S					S		S				

Emergency Support Function Assignment Matrix, Federal Response Plan

P = Primary Agency: Responsible for management of ESF

S = Support Agency: Responsible to supporting the Primary Agency

ENDNOTES

¹ Department of the Army, Memorandum dated 20 October 1995: "Initial After Action Report: Department of defense Assets conducting Hurricane Marilyn Relief Operations" Summary of comments contained in the AAR submitted to First Continental United States Army.

² The strength of a hurricane is rated from 1 to 5. The mildest, Category 1, has winds of at least 120 km/h (74 mph). The strongest (and rarest), Category 5, has winds that exceed 250 km/h (155 mph). Within the eye of the storm, which averages 24 km (15 mi) in diameter, the winds stop and the clouds lift, but the seas remain very violent.. Category two hurricanes posses winds between 75 and 95 miles per hour. Additional information about the Saffir-Simpson Hurricane Scale and the effects of a hurricane can be found at: <http://www.nhc.noaa.gov/aboutsshs.html>.

³ Digital photos of the Hurricane Marilyn damage can be viewed at FEMA's web site. www.fema.gov

⁴ FEMA, *Disaster Facts, Top Ten Disasters Ranked By FEMA Costs (1989-1999)*, [FEMA Virtual Library and Reading Room] Accessed February 21, 2000, available from http://www.fema.gov/library/df_2.htm Hereafter referred to as FEMA, *Disaster Facts*. Hurricane Marilyn is the tenth most cost disaster during the decade of 1989 -1999.

⁵ The lessons learned are contained in a database known as JULLS (Joint Universal Lessons Learned) and can be found at the Center for Army Lessons Learned located at Fort Leavenworth, Kansas.

⁶ FEMA, *History of FEMA*, [FEMA Virtual Library and Reading Room] Accessed February 21, 2000, available from http://www.fema.gov/library/df_2.htm. This citation states that The Congressional Act of 1803 was considered the first piece of disaster legislation. Federal assistance was provided to a New Hampshire town following an extensive fire.

⁷ U.S. Army FM 100-19, *Domestic Support Operations*, (Washington D.C.: Headquarters Department of the Army, 1 July 1993), 1-3. Commanders can assist local communities in a variety of ways. For examples and detailed explanations of assistance authorized review Chapter Eight, Community Assistance.

⁸ "Freedmen's Bureau," Microsoft® Encarta® Encyclopedia 99. [CDROM] © 1993-1998 Microsoft Corporation. The Freedman Bureau's principal aim was to provide assistance to the newly emancipated blacks of the South after the American Civil War. The army assisted by providing temporary food and shelter. This activity was authorized by congressional action and continued into 1866 by a vote of Congress over a presidential veto.

⁹ Flood control and authorization for flood prevention is contained in the Flood Control Act. Response and mitigation actions for weapons of mass destruction are contained in Presidential Decision Directive 39(PDD-39), *U.S. Policy on Counter Terrorism* dated June 21, 1995, PDD-62,

U.S. Policy on Combating Terrorism, dated May 22, 1998, and PDD-63, *Critical Infrastructure Protection*, dated May 22, 1998.

¹⁰ FEMA, *History of FEMA*, [FEMA Virtual Library and Reading Room], 2.

¹¹ U.S. Public Law 93-288, *The Disaster Relief Act of 1974* (22 May 1974), 164- 166. Hereafter referred to as *The Disaster Relief Act of 1974*. The provision also provides for the following services or assistance: "The performance of emergency works or services includes, but is not limited to search and rescue, emergency medical care, emergency mass care, emergency shelter, provisions of food, water, medicine, and other essential needs, including movement of supplies or persons; clearance of roads and construction of temporary bridges necessary to perform emergency tasks and essential services; provisions of temporary facilities for schools and other essential community services; demolition of unsafe structures that endanger the public; warning of further risks and hazards; public information and assistance on health and safety measures; technical advice to State and local governments on disaster management and control; education of immediate threats to life, property and public health and safety."

¹² *Message from the President of the United States*, Reorganization Plan Number 3 of 1978, House Document No. 95-356, 95th Congress, 2nd session (Washington, D.C.: GPO, 1978) 3. as quoted in LTC Patrick Connors, *An Assessment of FEMA Today*, U.S. Army War College Essay, (Carlisle Barracks, Pennsylvania: Defense Technical Institute, March 1986), 8.

¹³ The Federal Response Plan for Public Law 93-288, as Amended, April 1992, 1.

¹⁴ FEMA, *Federal Response Plan; An Executive Overview*, April 1999, (Washington: D.C.: Federal Emergency Management Agency), Folded handout, and FEMA Briefing: "FDR Brief, EPLO Course", as of 7/99 found in U.S. First Army, *Department of Defense Emergency Preparedness Course*, Course Book #1 dated 3-7 January 2000 (available from Mr. Kelly Shields, FORSCOM Hqs, Fort Gillem, GA), 11. The FEMA briefing here after is referred to as FEMA: *FDR Brief, EPLO Course*. The April 1999 Federal Response Plan Handout from FEMA provides an excellent overview of the ESFs. The ESF chart found in FM100-19 on page 5-7 is outdated. In 1993, the US Army was lead agency for urban search and rescue, even though the military was trained only in rugged terrain search and rescue. FEMA is now the lead agency for urban search and rescue allowing it to tap into state and local search and rescue teams trained to conduct searches in urban environment. DoD is still a supporting agency and assists in both remote and urban terrain searches.

¹⁵ FM 100-19, 3-2.

¹⁶ FEMA: *FDR Brief, EPLO Course*, slide/handout 10.

¹⁷ *Ibid.*, slide/handout 7. *Posse Comitatus Act* is contained in Section 1385, *et Seq* of Title 18 United States Code.

¹⁸ *Ibid.*, slide/handout 8. Insurrection laws are found under Sections 331-35 of Title 10 United States Code.

¹⁹ Ibid., slide/handout 6. and Title 10 U.S. Code (accessed 20 Feb 2000) available from <http://www4.law.cornell.edu/uscode/10/index.html>.

²⁰ FM 100-19, 2-9.

²¹ FM 100-19, 1-3, and FEMA: *FDR Brief, EPLO Course*, slide/handout 7. Section 1385, et seq of Title 18 U.S. Code specifically prohibits the use of federal troops for law enforcement, specifically naming the Air Force and Army. The marines and Navy are similarly prohibited under DOD directives.

²² FEMA: *FDR Brief, EPLO Course*, slide/handout 8.

²³ FM 100-19, 2-5.

²⁴ Ibid., 2-4 to 2-5.

²⁵ FEMA Virtual Library, <http://www.fema.gov>.

²⁶ FM 100-19, 2-8.

²⁷ John Y. Schrader, *"The Army's Role in Domestic Disaster Support,"* (Santa Monica, CA: RAND, Arroyo Center, 1993).

²⁸ FM 100-19, xviii.

²⁹ *The Disaster Relief Act of 1974*, 166.

³⁰ See Annex A for a detailed description of the ESFs.

³¹ FEMA, *Disaster Facts*.

³² Joint Task Force Andrew, *"Joint Task Force Andrew After Action Review, Volume I: Overview Executive Summary,"* Miami, Florida: Joint Task Force Andrew (15 October 1992), 2. Hereafter referred to as "JTF AAR."

³³ Tom Mathews, "What Went Wrong?" *Newsweek*, 7 September 1992.

³⁴ Governor's Disaster Planning and Response Review Committee, Final Report. January 15, 1993. Phillip D. Lewis, Chairman.

³⁵ FEMA organizes disaster relief activities in three phases: response, recovery, restoration. Response focuses life sustaining functions to meet immediate needs for food, water, shelter and power. Recovery begins the process of returning the community infrastructure and services to a status that satisfies the needs of the population. Restoration is long-term contractor support which returns the community to pre-incident conditions.

³⁶ JTF AAR, 2. The state Adjutant General activated units along the forecasted hurricane track. These units deployed to Armories north of the impact area so that a ready force would be available to respond in the first few hours after the hurricane made landfall.

³⁷ Mathews, 23.

³⁸ JTF AAR, 1. Not only was this the largest peacetime deployment of forces to support civil authorities it was the first time the military deployed a JTF for disaster response.

³⁹ Ibid., 3.

⁴⁰ Mathews, 23.

⁴¹ JTF AAR, 4. and Major Carl E. Fischer, "Interagency Cooperation: FEMA and DOD in Domestic Support Operation," (Monograph, Command and General Staff College, 1997), 15.

⁴² JTF AAR, 4.

⁴³ Center for Army Lessons Learned (CALL), Operations Other Than War, Volume II, *Disaster Assistance*, (Fort Leavenworth, KS, 66027-7000, No.93-6, October 1993), I-5. Hereafter referred to as "CALL Newsletter 93-6."

⁴⁴ CALL Newsletter 93-6, I-7.

⁴⁵ FM 100-19, 3-5. Careful rules must be followed regarding MI officers. "MI personnel during domestic support operations is restricted as a direct result of lessons learned from their improper use in the 1960s."

⁴⁶ ERT A actually set up operations in the Chinese Restaurant adjacent to VITEMA EOC. The same man owned this building and the VITEMA EOC. Ironically, the restaurant owner had built his restaurant to withstand category 3 hurricanes without any damage. When the territorial governor turned the power off four hours before hurricane landfall, the ERT-A relied on portable generator power deployed by the team.

⁴⁷ National Hurricane Center, Hurricane Luis Preliminary Report, 27 August – 11 September 1995, National Hurricane Center Reports found at NOAA website (accessed 10 April 2000), available from: <http://www.nhc.noaa.gov/1995luis.html>.

⁴⁸ National Hurricane Center, Hurricane Marilyn Preliminary Report, 12-22 September 1995, National Hurricane Center Reports found at NOAA website: (accessed 10 April 2000), available from: <http://www.nhc.noaa.gov/1995marilyn.html>.

⁴⁹ Digital photos of the Hurricane Marilyn damage can be viewed at FEMA's web site. www.fema.gov.

⁵⁰ FEMA, *Disaster Facts, Top Ten Disasters Ranked By FEMA Costs (1989-1999)*, [FEMA Virtual Library and Reading Room] Accessed February 21, 2000, available from http://www.fema.gov/library/df_2.htm Hereafter referred to as FEMA, *Disaster Facts*. Hurricane Marilyn is the tenth most costly disaster during the decade of 1989–1999.

⁵¹ All times are St. Thomas Times (Atlantic Standard Time).

⁵² DCE Daily SITREP to Headquarters, First Army EOC, *Operation Hurricane Marilyn Relief SITREP #2*, 161500SEP95, 1. and DCE, *Operation Hurricane Marilyn Relief Initial SITREP*, 161500SEP95. The ERT-A arrived on the island at 0900 and submitted its initial ESF assessment at 1045 outlining the extensive damage to the airport, wooden structures, power lines, cell tower communication, public buildings including schools and the island's only hospital as well as blockage of the island's navigational channel.

⁵³ Authorized by FEMA Federal Disaster #1067.

⁵⁴ DCE Memorandum to Headquarters, First Army, "Initial After Action Report; Department of Defense Assets Conducting Hurricane Marilyn Relief Operations", dated 19 October 1995, 4.

⁵⁵ This example was a personally experienced by author during DCE operations on St. Thomas. The Force provider set was one of two that the Army had, and if set up would require an area approximately 10 acres in size. The proposed sites were all smaller than 5 acres. FEMA also realized if the force provider shelter was set-up, FEMA and U.S.V.I would have to cost share for a replacement module for the Army. At the time the cost of the module, and 30 days operation exceeded 500,000 dollars. The RFA was cancelled by FEMA after the analysis.

⁵⁶ FM 100-19, 2-3.

⁵⁷ John Y. Schrader, *"The Army's Role in Domestic Disaster Support,"* (Santa Monica, CA: RAND, Arroyo Center, 1993), 17.

⁵⁸ Joint Publication 3.0, *Doctrine for Joint Operations*, 1 February 1995, [Joint Electronic Library, February 2000], II-3.

⁵⁹ Ibid., Chapter V, V-1 to V-14.

⁶⁰ Joint Publication 3.07 *Military Operations Other than War*, 16 Jun 1995 [Joint Electronic Library, February 2000], III-8.

⁶¹ Joint Pub 3.0, i.

⁶² Ibid., V-1.

⁶³ FM 100-19, 1-4. and *Joint Pub 3.0*, vxi, and *Joint Pub 3-07*, II-1 to II-8.

⁶⁴ ERT-A personnel observed looting enroute from the airport to VITEMA EOC. Looters and roving bands of armed persons avoided US Army personnel, even though deployed soldiers did not have weapons with them.

⁶⁵ Joint Pub 3-0, V-10.

⁶⁶ The only references to disaster relief are in support of humanitarian assistance operations in foreign countries. Military support to civil authorities (MSCA) is discussed in Joint Pub 3-07 on page III-8.

⁶⁷ The website is available at: <http://freddie.forscom.army.mil/dodepc>.

⁶⁸ Headquarters, Department of the Army, *Army Regulation 500-60, Emergency Employment of Army and Other Resources, Disaster Relief*. (Washington D.C.: 1 August 1981), 1-1 to 2-6. This regulation identifies federal statutory laws and federal regulations and directives providing for the use of military forces in support of civil authorities. Statutory authority includes: *Disaster Relief Act of 1974* (42 USC 5121-5189), Section 701 of *The Flood Control Act* (33 USC 701-709a), *The Economy Act* (31 USC 686), *Posse Comitatus Act* (18 USC 1385) and American National Red Cross Support (Section 3 Title 36 United States Code). DoD delegation includes the assignment of the Secretary of the Army as the Executive Agent to federally declared disasters, fires fighting under Boise Inter Agency Fire Agency, support to the American National Red Cross, and other disasters when directed by the Secretary of Defense.

⁶⁹ FM 100-1, *The Army*, (Washington D.C.: Headquarters Department of the Army, 14 June 1994), v. This opening line contained in the preface describes the scope and focus of FM 100-1. Note that FM 100-1 is the cornerstone document, while FM 100-5 (soon to be FM 3-0) is the keystone document.

⁷⁰ *Ibid.*, 41-43.

⁷¹ FM 100-5, *Operations*, (Washington D.C.: Headquarters Department of the Army, 1 June 1993), 1-3. This is the Army's keystone doctrinal manual and is currently under revision. The new manual will be numbered FM 3-0 to align with the numbering system found in joint publications.

⁷² *Ibid.*, 13-1 to 13-8. In the 1993 version of FM 100-5, the term used is operations other than war (OOTW) instead of MOOTW. FM 3-0 (FM 100-5) (Final Draft) uses the term MOOTW.

⁷³ FM 100-19, vvii, viii.

⁷⁴ Chapter 1 covers the concepts and principles of domestic support. Chapter 2 focuses on roles and responsibilities, while Chapter 5 specifically addresses the topic of disasters and domestic support.

⁷⁵ AR 500-60, 2-1.

⁷⁶ FM 100-19, 2-1.

⁷⁷ MACA is found in DoD Directive 3025.15 and address natural and manmade disasters and other military domestic support. MSCA (Military Support to Civil Authorities) is found 3025.1.

⁷⁸ FM 5-415, *Fire-Fighting Operations* (Washington D.C.: Headquarters Department of the Army, 9 Feb), 1-3.

⁷⁹ Six of the thirteen officers and NCOs of the advance party had experience with FEMA or National Interagency Fire Center or U.S. Army Corps of Engineers.

⁸⁰ CALL's website is available at: <http://call.army.mil/call.htm> Access to Databases and JULLS requires registration with CALL.

⁸¹ An example AAR product is CALL Newsletter 93-6: *Operations Other Than War, Volume II, Disaster Assistance*.

⁸² Lessons learned are reported and frequently not used. "Almost every problem occurring during Operation Restore Hope has already been documented in JULLS [Joint Universal Lessons Learned System] as a result of previous exercises and contingencies. There appears to be continuing trend of failure to fix problems already known [sic] to exist. We end up paying again to achieve the same undesirable results" Quoted from: United States General Accounting Office, *"Military Training, Potential to Use Lessons Learned to Avoid Past Mistakes is Largely Untapped,"* Report to Chairman, Subcommittee on Military Personnel, Committee on National Security, House of Representatives, GAO/NSAID-95-152, August 1995, 4.

⁸³ DOMS website is available at: <http://freddie.forscom.army.mil/macac> (Access by .mil ISP) and DoD Emergency Preparedness Course available at: <http://freddie.forscom.army.mil/dodepc>.

⁸⁴ Ibid.

⁸⁵ Joint Pub 3.0, Chapter V, V-1 to V-14.

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<http://www.homelanddefense.org/journal/>

ANSER's Virtual Library

http://www.homelanddefense.org/homeland_dev/start2.cfm

Search engine that allows access to materials related to homeland defense. PDDs, Executive Orders, and GAO reports are a few notable sources.

Protecting the Homeland: The Best Defense is to Give No Offense
Ivan Eland

<http://www.cato.org/pubs/pas/pa-306es.html>

5 May 1998

Army Soldier and Biological Chemical Command
<http://www.sbccom.army.mil/sitemap.htm>

Reserve Component Employment Study 2005

http://www.defenselink.mil/pubs/rces2005_072299.html#summary

This site explores the duties of the military reserves, including homeland defense.

Are We Prepared for Terrorism Using Weapons of Mass Destruction?
Eric R. Taylor

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National Domestic Preparedness Office
<http://www.ndpo.gov/>
This site is the clearinghouse for state, local and federal weapons of mass destruction information and assistance.

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Report
John M. Dower et al.
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<http://stinet.dtic.mil>*

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♦AD-A389519

NAVAL WAR COLL NEWPORT RI

Command and Control in Domestic Maritime
Disaster Response Operations

05 Feb 2001 27 PAGES

PERSONAL AUTHORS: Jones, James J.

ABSTRACT: The U.S. Coast Guard has responded to numerous maritime disasters in the last few years, which highlights the need for efficient command and control. These multi-agency, multi-jurisdictional Domestic Maritime Disaster Response Operations (DMDRO) have reinforced the highly visible precedent that the federal government will assist local and state agencies whenever necessary. As this trend is likely to continue, action should be taken to promote efficient use of manpower and resources and prevent the ad hoc command and control arrangement that arises with each new DMDRO. This is an issue for the operational commander because it requires massive and immediate deployment of resources to offer the best hope of finding survivors and preserving evidence. DMDRO can affect civil-military relations, mission readiness, ability to respond to other crises, unit preparedness, budgets, etc. Thus, the operational commander must have a smoothly functioning Command and Control (C2) element to ensure that each phase of DMDRO is carried out safely and efficiently.

DESCRIPTORS: *DISASTERS, *EMERGENCIES, *OPERATIONAL READINESS, *RESPONSE, *COMMAND AND CONTROL SYSTEMS, MILITARY PERSONNEL, DEPLOYMENT, UNITED STATES GOVERNMENT, EFFICIENCY, MANPOWER, MISSIONS, RESOURCES, SURVIVAL(PERSONNEL), COAST GUARD, COMMUNITY RELATIONS, DMDRO(DOMESTIC MARITIME DISASTER RESPONSE OPERATIONS).

AD-A389373

DEFENSE SCIENCE BOARD WASHINGTON
DC

Protecting the Homeland, Report of the Defense
Science Board, 2000 Summer Study Executive
Summary. Volume 1

01 Feb 2001 19 PAGES

PERSONAL AUTHORS: Poste, George;
Hagengruber, Roger; Wright, Larry; David, Ruth;
Marino, Pete

ABSTRACT: This Executive Summary of the DSB 2000 Summer Study was aimed at assisting the Department of Defense and the Intelligence Community in defining their roles in protecting the nation from unconventional attacks on the United States. This four volume report documents the work of four DSB Task Forces: Defensive Information Operations (Volume II), Unconventional Nuclear Warfare Defense (Volume III), Defense Against Biological Weapons (Volume IV), and Intelligence Needs for Civil Support (incorporated in the other volumes). The overarching rationale for the importance of unconventional threats to the U. S. homeland and the key recommendations of the Summer Study are contained within Volume I, Executive Summary.

DESCRIPTORS: *UNITED STATES, *THREAT EVALUATION, *UNCONVENTIONAL WARFARE, NUCLEAR WARFARE, DEPARTMENT OF DEFENSE, INTELLIGENCE, CIVIL DEFENSE, TASK FORCES, BIOLOGICAL WARFARE, INFORMATION WARFARE, UNITED STATES HOMELAND, DSB(DEFENSE SCIENCE BOARD).

AD-A389283

SOLDIER AND BIOLOGICAL CHEMICAL
COMMANDABERDEEN PROVING GROUND
MD

Domestic Preparedness Program: Testing of
MIRAN Sapphire Portable Ambient Air Analyzers
Against Chemical Warfare Agents

01 Feb 2001 21 PAGES

PERSONAL AUTHORS: Longworth, Terri L.;
Barmhouse, Jacob L.; Ong, Kwok Y.

ABSTRACT: This report characterizes the
Chemical Warfare (CW) agent detection potential
of the commercially available MIRAN Sapphire
Portable Ambient Air Analyzers. These detectors
were tested against HD, GB, and GA vapor at
various conditions. This report is intended to
provide the emergency responders concerned with
CW agent detection an overview of the detection
capabilities of these detectors.

DESCRIPTORS: *CHEMICAL WARFARE
AGENTS, *CHEMICAL AGENT DETECTORS,
PORTABLE EQUIPMENT, CHEMICAL
CONTAMINATION, VAPORS, EXPLOSIVES,
GALLIUM.

AD-A389140

NAVAL WAR COLL NEWPORT RI

Weapons of Mass Destruction and the Homeland
Threat: Deterrence through Consequence
Management

05 Feb 2001 29 PAGES

PERSONAL AUTHORS: Tagg, David A.

ABSTRACT: The ability of the United States to
protect its global interests, fulfill its responsibilities
in the world community, and meet the challenges
of the future depends on its ability to exercise the
strategic concepts of decisive force, power
projection, overseas presence, and strategic agility.
Through asymmetric employment of Weapons of
Mass Destruction (WMD), potential adversaries
can attack the United States homeland, threaten
America's critical strengths, and undermine the
military's ability to maintain full spectrum
dominance, which is the key to achieving these
strategic concepts. America's WMD counter-
proliferation strategy depends, in part, on an
effective consequence management program to
deter potential adversaries from employing WMD
against the U.S. homeland. Progress has been
made in implementing this program. However,
failure to define the desired outcome for the
national strategy, poor interagency coordination,
and misdirected training continue to limit the
overall effectiveness of the program. Prompt and
urgent implementation of remedial measures is
suggested for achieving near-term improvement.
The current state of consequence management
demands such improvement if adversarial attacks
are to be adequately deterred.

DESCRIPTORS: *MILITARY STRATEGY,
*MANAGEMENT, *MASS DESTRUCTION
WEAPONS, *DETERRENCE, GLOBAL,
UNITED STATES, POWER, MILITARY
PLANNING, NATIONAL DEFENSE,
OVERSEAS, WMD(WEAPONS OF MASS
DESTRUCTION), HOMELAND DEFENSE,
CONSEQUENCE MANAGEMENT,
COUNTERPROLIFERATION,
COUNTERTERRORISM.

AD-A389132

EDGEWOOD CHEMICAL BIOLOGICAL
CENTER ABERDEEN PROVING GROUND MD

Domestic Preparedness Program: Testing of M90-
D1-C Chemical Warfare Agent Detector Against
Chemical Warfare Agents

01 Feb 2001 14 PAGES

PERSONAL AUTHORS: Longworth, Terri L.;
Ong, Kwok Y.; Barnhouse, Jacob L.

ABSTRACT: This report characterizes the
Chemical Warfare (CW) agent detection potential
of the commercially available M90-D1-C Chemical
Agent Detector. These detectors were tested
against HD, GB, and GA vapor at various
conditions. This report is intended to provide
the emergency responders concerned with CW
agent detection an overview of the detection
capabilities of these detectors.

DESCRIPTORS: *CHEMICAL AGENT
DETECTORS, PORTABLE EQUIPMENT,
VAPORS, GALLIUM, MUSTARD AGENTS,
HAND HELD, CHEMICAL WARFARE
AGENTS, GA AGENT, GB AGENT, HD
AGENT, CHEMICAL WARFARE AGENT
DETECTION, DETECTOR TESTING, FIELD
AND LABORATORY INTERFERENCES,
VAPOR TESTING.

AD-A389091

EDGEWOOD CHEMICAL BIOLOGICAL
CENTER ABERDEEN PROVING GROUND MD

Domestic Preparedness Program: Testing of MSA
Detector Tubes Against Chemical Warfare Agents

01 Feb 2001 21 PAGES

PERSONAL AUTHORS: Ong, Kwok Y.;
Longworth, Terri L.; Barnhouse, Jacob L.; Cajigas,
Juan C.

ABSTRACT: This report characterizes the
Chemical Warfare (CW) agent detection potential
of the commercially available MSA Detector
Tubes. These detectors were tested against HD,
GB, and GA vapor at various conditions. This
report is intended to provide the emergency
responders concerned with CW agent detection an
overview of these detector tubes.

DESCRIPTORS: *CHEMICAL AGENT
DETECTORS, *TUBES, DETECTION,
CHEMICAL WARFARE AGENTS.

AD-A388953

ARMY WAR COLL CARLISLE BARRACKS PA

The Army's Commitment to Supporting the Homeland Security Chemical, Biological, Radiological, Nuclear, and High-Yield Explosive Weapon Terrorist Threat: Can the Reserve Components Meet the Requirement by Themselves

10 Apr 2001 30 PAGES

PERSONAL AUTHORS: Anderson, Donnie P.

ABSTRACT: The United States Government has identified of highest priority the development of effective capabilities for preventing and managing the consequences of terrorists use of Chemical, Biological, Radiological, Nuclear and High-yield Explosive (CBRNE) materials and weapons on the American homeland. The Department of Defense (DOD) and Army both have a significant role in this effort. This paper will look at those roles and focus on the Army's ability to support the Homeland Security (HLS) CBRNE terrorist threat in the areas of agent sampling, detection, identification, and decontamination operations. Specifically, it will address the Reserve Components (RC) capability for responding to an incident and demonstrate the value-added of Active Component (AC) forces. The conclusion is the RC cannot fulfill the Department of the Army's commitment to this important mission by itself: AC forces must assume a more prominent role to ensure an adequate DOD response in this critical area.

DESCRIPTORS: *BIOLOGICAL WARFARE, *CHEMICAL WARFARE, *TERRORISM, *RADIOLOGICAL WARFARE, NUCLEAR WEAPONS, TERRORISTS, MILITARY RESERVES, MILITARY REQUIREMENTS, NATIONAL SECURITY, THREATS, DEFENSE PLANNING, HIGH EXPLOSIVES.

♦AD-A388944

GENERAL ACCOUNTING OFFICE
WASHINGTON DC

Combating Terrorism: FEMA Continues to Make Progress in Coordinating Preparedness and Response

01 Mar 2001 42 PAGES

ABSTRACT: In policy and practice, FEMA has generally addressed the key lessons learned from its experience in coordinating federal consequence management activities after the Oklahoma City bombing. In analyzing the lessons learned after the bombing, FEMA identified three major actions that needed to be taken: (1) create guidance to facilitate agencies' coordinated response to terrorist events, (2) ensure that state and local emergency plans terrorism, the Federal Response Plan, and (3) establish an adequate number of emergency response teams to deal with mass casualties. Improvements in these areas have been made across the board. FEMA has updated the Federal Response Plan to address how federal agencies, states, and localities would work together to respond to an act of terrorism, and states are increasingly modeling their emergency operations plans on the federal plan. In response to a PDD 39 requirement and to ensure that states are prepared to respond to a terrorist incident, FEMA assessed states' capabilities for consequence management in 1995 and set up a system to continue monitoring those capabilities. In 1997, FEMA reported to the Congress and to the President that the states had the basic capabilities to respond to disasters but were not well prepared for a terrorist incident involving a Weapon of Mass Destruction. On the federal level, FEMA coordinates extensively with other involved agencies on key, national-level terrorism preparedness guidance and policy documents and on activities, as required by PDDs 39 and 62.

DESCRIPTORS: *TERRORISM, *BOMBING, WEAPONS, CONGRESS, POLICIES, UNITED STATES GOVERNMENT, LESSONS LEARNED, CRISIS MANAGEMENT, EMERGENCIES, EDUCATION, SECURITY, TEAMS(PERSONNEL), PLANNING, CASUALTIES, DOMESTIC, URBAN AREAS, OKLAHOMA, GAO REPORTS.

♦Included in The DTIC® Review, Summer 2001

◆AD-A387874

ARMY WAR COLL STRATEGIC STUDIES
INST CARLISLE BARRACKS PA

The Army and Homeland Security: A Strategic
Perspective

01 Mar 2001 30 PAGES

PERSONAL AUTHORS: Echevarria, Antulio J., II

ABSTRACT: The topic of homeland security includes a broad array of missions and mission areas ranging from national missile defense to military assistance to civil authorities. The topic has recently attracted a great deal of attention due to the public's heightened awareness of the variety and nature of emerging threats and of the United States vulnerabilities to them. The Army Staff was assigned to investigate the Army's role in homeland security from a strategic, rather than a legal or procedural perspective. The author achieves this perspective by placing homeland security missions within the larger spectrum of operations. In so doing, he exposes potential problem areas-missions requiring more or different force structure than that already available-for further action by the Army. He also recommends that the Army consider alternative force-sizing metrics that include, as a minimum, the high-end homeland security identified in the study.

DESCRIPTORS: *STRATEGY, *SECURITY,
*ARMY, *NATIONAL DEFENSE, UNITED
STATES, MILITARY ASSISTANCE,
VULNERABILITY, MISSIONS, AWARENESS.

AD-A387866

GENERAL ACCOUNTING OFFICE
WASHINGTON DC

Combating Terrorism: Comments on
Counterterrorism Leadership and National Strategy

27 Mar 2001 10 PAGES

ABSTRACT: Based on our prior and ongoing work, two key issues emerge that the new President and Congress will face concerning programs to combat terrorism. First, the overall leadership and management of such programs are fragmented within the federal government. No single entity acts as the federal government's top official accountable to both the President and Congress. Fragmentation exists in both coordination of domestic preparedness programs and in efforts to develop a national strategy. The Department of Justice worked with other agencies to develop the Attorney General Five-Year Interagency Counterterrorism and Technology Crime Plan. While this plan is the current document that most resembles a national strategy, we believe it still lacks some critical elements to include measurable desired outcomes, linkage to resources, and a discussion of the role of state and local governments.

DESCRIPTORS: *COUNTERTERRORISM,
*TERRORISM, MILITARY INTELLIGENCE,
CONGRESS, MILITARY STRATEGY, UNITED
STATES GOVERNMENT, LEADERSHIP,
PRESIDENT(UNITED STATES), GAO
REPORTS.

AD-A387852

RAND CORP SANTA MONICA CA

Preparing the U.S. Army for Homeland Security
Concepts, Issues, and Options

01 Jan 2001 328 PAGES

PERSONAL AUTHORS: Larson, Eric V.; Peters,
John E.

ABSTRACT: This report addresses the many conceptual, programmatic, and practical issues associated with an emergent mission area for the U.S. Army and Department of Defense (DoD) called "homeland security" (until recently the mission was known as "homeland defense"). At the most basic level, the report seeks to provide Army and other DoD audiences with an introduction to, and overview of, four of the five homeland security task areas, and the various organizations at the federal, state, and local level that the Army and DoD may need to interface with under different circumstances. More ambitiously, it seeks to define homeland security in a concrete way and to provide the necessary background and conceptual and analytic constructs for wrestling with the key issues and choices the Army will face as the mission area matures. The research reported here was initiated as homeland security was emerging as an issue of policy concern and was conducted during Fiscal Year 1999, a year in which the Army and Department of Defense considered but had not yet resolved many key homeland security-related issues. These include a definition of homeland security, the key task areas that constitute homeland security, and the programs and capabilities needed to respond to these various threats. In a similar vein, the broader federal government enacted or refined numerous programs to combat terrorism and Weapons of Mass Destruction and to mitigate the threat to critical infrastructure.

DESCRIPTORS: *NATIONAL SECURITY,
*ARMY PLANNING, *NATIONAL DEFENSE,
*HOMELAND SECURITY, MILITARY
OPERATIONS, DEPARTMENT OF DEFENSE,
MILITARY STRATEGY, THREATS,
MISSIONS, MILITARY CAPABILITIES.

◆AD-A387385

DEPARTMENT OF DEFENSE WASHINGTON
DC

CONPLAN-United States Government Interagency
Domestic Terrorism Concept of Operations Plan

01 Jan 2001 46 PAGES

ABSTRACT: The United States Government Interagency Domestic Terrorism Concept of Operations Plan, hereafter referred to as the CONPLAN, is designed to provide overall guidance to Federal, State and local agencies concerning how the Federal government would respond to a potential or actual terrorist threat or incident that occurs in the United States, particularly one involving WMD.

DESCRIPTORS: *NATIONAL SECURITY,
*TERRORISM, UNITED STATES
GOVERNMENT, THREATS, RESPONSE,
MASS DESTRUCTION WEAPONS, DEFENSE
PLANNING, CONPLAN.

AD-A387381

ARMY WAR COLL STRATEGIC STUDIES
INST CARLISLE BARRACKS PA

Asymmetry and U.S. Military Strategy: Definition,
Background, and Strategic Concepts

01 Jan 2001 31 PAGES

PERSONAL AUTHORS: Metz, Steven; Johnson,
Douglas V., II

ABSTRACT: This report gives a simple and comprehensive definition of strategic asymmetry reflecting the need for military doctrine which transcends today's specific issues. The authors assess the strategic situation of the United States in terms of positive and negative asymmetry and offer five strategic concepts as part of the response to asymmetry: maximum conceptual and organizational adaptability, focused intelligence, minimal vulnerability, full spectrum precision, and an integrated homeland security strategy.

DESCRIPTORS: *MILITARY STRATEGY,
MILITARY INTELLIGENCE, UNITED STATES,
STRATEGIC ANALYSIS, MILITARY
DOCTRINE, VULNERABILITY,
ASYMMETRY, ADAPTATION, MILITARY
PLANNING, MILITARY ORGANIZATIONS.

AD-A387277

INSTITUTE FOR DEFENSE ANALYSES
ALEXANDRIA VA

The US Commission on National Security/21st
Century (Hart-Rudman) Overview and
Observations on Phase I

01 Dec 2000 106 PAGES

PERSONAL AUTHORS: Thomason, James S.

ABSTRACT: The US Commission on National Security for the 21st Century-informally known as "Hart-Rudman" for its co-chairs, former senators Gary Hart and Warren Rudman-was chartered by Defense Secretary William Cohen in the summer of 1998 to study several critical national security issues. In September of 1999 the commissioners provided the Secretary with their first (Phase I) report, which seeks to characterize the future security environment the United States will face over the next 25 years. The author served as a full-time member of the senior study group supporting the commission during Phase I. In this briefing he first describes highlights and some supporting details of the Commission's Phase I work. Next he offers his views on what the Commission has added to the national security debate. The author concludes with several observations regarding the likely contributions by the Commission and its senior study group in the remaining phases of their work.

DESCRIPTORS: *NATIONAL SECURITY,
*DEFENSE PLANNING, CIVIL DEFENSE,
STRATEGIC ANALYSIS, THREAT
EVALUATION, TECHNOLOGY
FORECASTING, ECONOMIC FORECASTING,
HOMELAND DEFENSE, HOMELAND
SECURITY, HART RUDMAN COMMISSION.

AD-A386945

INSPECTOR GENERAL DEPT OF DEFENSE
ARLINGTON VA

Management of National Guard Weapons of Mass
Destruction-Civil Support Teams

31 Jan 2001 53 PAGES

ABSTRACT: The Weapons of Mass Destruction Civil Support Team (WMD-CST) Program is intended to help prepare the United States against terrorist use of a Weapon of Mass Destruction and is commonly referred to as a homeland defense measure. Originally, 10 WMD-CSTs were established with a planned initial operational capability date of January 2000. In FY 2000 and FY 2001, Congress authorized an additional 17 and 5 WMD-CSTs, respectively. Our overall audit objective was to evaluate the program management of chemical and biological defense resources in the National Guard and Reserve forces. For this segment of the audit, we evaluated the program management of National Guard units charged with chemical and biological defense responsibilities for homeland defense. Future reports will deal with the financial management of the WMD-CST program and the management of chemical and biological defense resources of National Guard and Reserve forces scheduled to deploy in the event of a major theater war.

DESCRIPTORS: *MANAGEMENT PLANNING AND CONTROL, *AUDITING, NATIONAL GUARD, MILITARY RESERVES, DEFENSE SYSTEMS, BIOLOGICAL WARFARE, CHEMICAL WARFARE, AUDIT REPORTS.

AD-A386780

NAVAL POSTGRADUATE SCHOOL
MONTEREY CA

Organizational Design Principles for Countering
Terrorism in the United States

01 Dec 2000 110 PAGES

PERSONAL AUTHORS: Mingus, Matthew C.; Orman, Richard D.

ABSTRACT: Recent terrorist activities (the World Trade Center bombing, the Oklahoma Federal Building bombing, the release of Sarin Gas in the Tokyo subway, etc.) have focused the national leadership on the topic of terrorism inside the borders of the United States. In response, two Presidential Decision Directives (PDD-62 and PDD-63) were issued to help define the terrorist threat and recommend a counter- terrorism organization in the federal government. However, the directives do not determine how the Federal government works with state and local authorities. The directives also do not focus on local, state, and federal capabilities to preempt a possible terrorist attack. This thesis builds a organizational framework of the U. S. counter-terrorism environment; explains the current U. S. counter-terrorism structure from a local perspective; develops a set of principles that could be used by any local or federal agency to develop a new or more efficient counter-terrorism organization; assesses two domestic counter-terrorism organizations; and proffers specific recommendations on how U. S. counter-terrorism organizations and programs could be more effective.

DESCRIPTORS: *UNITED STATES, *COUNTERTERRORISM, NATIONAL SECURITY, THREATS, THESES, TERRORISM, SPECIAL OPERATIONS FORCES.

AD-A386403

NAVAL POSTGRADUATE SCHOOL
MONTEREY CA

Contingency Contracting within the Department of
Defense: A Comparative Analysis

01 Dec 2000 105 PAGES

PERSONAL AUTHORS: McMillion, Chester L.

ABSTRACT: Contingencies such as regional conflicts, humanitarian and peacekeeping missions, or international or domestic disaster relief missions dictate the immediate deployment of military forces. This rapid deployment of Service members and other military assets requires concurrent deployment of supporting assets such as Contingency Contracting Officers (CCOs). The purpose of this research was to detail and compare the contingency contracting establishments of the Air Force, Army, Navy/Marine Corps, and Defense Contract Management Agency. The thesis compares and contrasts the regulations governing the contingency contracting operations, the organization structure, contingency contracting support plans, and the training requirements and duties of CCOs of the aforementioned components. All components have adequate structures in place for contingency contracting. However, the research provides several conclusions and recommendations on how the Services could conduct contingency contracting operations more efficiently. Recommendations include the establishment of a contingency contracting chief within the Marine Corps, scenario-based field training within Department of Defense and the Services, and tailored pre-deployment training within each Service. As the Services continuously redefine their missions, they must adapt all subordinate units and organizations to ensure personnel have the training and equipment to meet any contingency.

DESCRIPTORS: *MILITARY FORCES(UNITED STATES), *MILITARY PERSONNEL, *DEPLOYMENT, *CONTRACT ADMINISTRATION, *LOGISTICS MANAGEMENT, *NAVAL PERSONNEL, *MILITARY TRAINING, DEPARTMENT OF DEFENSE, MARINE CORPS, EMERGENCIES, THESES, MISSIONS, RAPID DEPLOYMENT, PEACEKEEPING, CCO(CONTINGENCY CONTRACTING OFFICERS).

AD-A385805

EDGEWOOD CHEMICAL BIOLOGICAL
CENTER ABERDEEN PROVING GROUND MD

Neighborhood Emergency Help Center Concept
Validation

01 Dec 2000 77 PAGES

PERSONAL AUTHORS: Walther, John D.;
Marvin, Freeman; Hayes, Susan

ABSTRACT: This report describes the validation process for the Neighborhood Emergency Help Center (NEHC), performed as part of the national Domestic Preparedness (DP) Program. The report briefly describes the DP Program, the Biological Warfare Improved Response Program (BWIRP), and development of the BW Response Template. The report then presents the validation methodology used to test and evaluate the NEHC component of the template. Finally, the report provides the results of the NEHC validation testing process and recommendations for improving the NEHC design.

DESCRIPTORS: *CIVIL DEFENSE, DISASTERS, CRISIS MANAGEMENT, EMERGENCIES, DECISION MAKING, PREPARATION, BIOLOGICAL WARFARE, OPERATIONS RESEARCH, DOMESTIC, DEFENSE PLANNING, NEHC(NEIGHBORHOOD EMERGENCY HELP CENTER), DOMESTIC PREPARDNESS.

AD-A385410

ARMY WAR COLL STRATEGIC STUDIES
INST CARLISLE BARRACKS PA

Papers from the Conference on Homeland
Protection

01 Sep 2000 281 PAGES

PERSONAL AUTHORS: Manwaring, Max G.

ABSTRACT: On April 11-13, 2000, the U.S. Army War College Strategic Studies Institute sponsored a major conference that examined what the Department of Defense must do "to insure domestic Tranquility, provide for the common defence..." given the increasing contemporary threats to the U.S. homeland. This book highlights the issues and themes that ran through the conference. As such, it is not a comprehensive record of the proceedings. It is organized as an anthology of the best of a series of outstanding conference presentations, revised in light of the discussions that took place there. Finally, the anthology is complemented by an overview and four specific recommendations. Those recommendations look to the future and place emphasis on the transformation strategy that conference participants considered essential to safeguard the American homeland now and into the future.

DESCRIPTORS: *DEPARTMENT OF DEFENSE, *NATIONAL SECURITY, *THREATS, *DOMESTIC TRANQUILITY, UNITED STATES GOVERNMENT, POLITICAL ALLIANCES, TRANSFORMATIONS, STATE GOVERNMENT, SITUATIONAL AWARENESS, MILITARY SECURITY, GLOBAL SECURITY.

AD-A385365

GENERAL ACCOUNTING OFFICE
WASHINGTON DC

Combating Terrorism Federal Response Teams
Provide Varied Capabilities; Opportunities Remain
to Improve Coordination

01 Nov 2000 79 PAGES

ABSTRACT: A terrorist act involving a chemical, biological, radiological, or nuclear agent or weapon presents an array of complex issues to state and local responders. The responders, who may include firefighters, emergency medical service personnel, and hazardous materials technicians, must identify the agent used in rapidly decontaminated victims and apply appropriate medical treatments. They must determine whether the agent has spread beyond the incident site and what actions should be taken to protect other people. They must also be concerned about damage to the physical infrastructure and about coordinating efforts with law enforcement personnel as they conduct their investigation. If the incident overwhelms the capabilities of state and local responders, they may turn to the federal government for assistance. Federal agencies may provide assistance by deploying various response teams. In response to your request, we reviewed federal agency teams that can respond to and help manage the consequences of a domestic terrorist incident involving chemical, biological, radiological, or nuclear agents or weapons. This report discusses (1) the characteristics of federal response teams, (2) whether duplication among teams belonging to different agencies exists, (3) the budget requirements process for teams and how the budgets are linked to a national strategy; and (4) initiatives to improve the operational coordination of federal response teams across agency lines.

DESCRIPTORS: *CRISIS MANAGEMENT, *EMERGENCIES, *TEAMS(PERSONNEL), *RESPONSE, UNITED STATES GOVERNMENT, MILITARY ASSISTANCE, STRATEGY, BUDGETS, DOMESTIC, MEDICAL SERVICES, MEDICAL PERSONNEL, TERRORISM, HAZARDOUS MATERIALS, LAW ENFORCEMENT OFFICERS, INFRASTRUCTURE, GAO REPORTS.

AD-A383895

ARMY COMMAND AND GENERAL STAFF
COLL FORT LEAVENWORTH KS

The Role of the Army Reserve in the Weapons of
Mass Destruction/Homeland Defense Program

02 Jun 2000 95 PAGES

PERSONAL AUTHORS: Smith, Joseph L.

ABSTRACT: Since the fall of the Berlin wall and the subsequent end of the Cold War, the United States faces a multidimensional threat never before seen within our nations' borders. Rogue nations and stateless organizations already have or are developing the capability to threaten the United States through acts of terror, information warfare, and the use of Weapons of Mass Destruction. As a nation, we are not prepared to prevent or respond to these threats. A federal infrastructure does not yet exist that can adequately prevent or react to such an attack. Given these increasing threats to the territory, population, and infrastructure of the United States, the Army Reserve should have an expanded role in providing homeland defense capabilities. The Army Reserve is well suited to homeland defense missions.

DESCRIPTORS: *NATIONAL DEFENSE, MILITARY RESERVES, NATIONAL SECURITY, UNITED STATES GOVERNMENT, CIVIL DEFENSE, THREATS, THESES, MASS DESTRUCTION WEAPONS, INFRASTRUCTURE, INFORMATION WARFARE.

AD-A382567

ASSOCIATION OF THE UNITED STATES
ARMY ARLINGTON VA INST OF LAND
WARFARE

National Missile Defense - Your Army Protecting
Our Homeland

01 Nov 1999 17 PAGES

ABSTRACT: Next summer, our nation's leadership will make a critical defense decision that will affect our defense posture well into the next millennium. After fifty years of research and development of ballistic missiles and missile defense systems, and many aborted attempts to field systems designed to provide a limited missile defense for the homeland, our nation's leadership will decide whether or not to deploy a National Missile Defense (NMD) system to meet the growing threat to the homeland from ballistic missile attack. If the President decides to deploy, a limited NMD system with ground-based elements manned by the Army could be operational in 2005. The defense of the United States is and always has been a soldier's most sacred responsibility. From the beginning, in 1775, the U.S. Army has played a pivotal role in the defense of the homeland. In 1794 the U.S. Congress charged the Army to build and staff coastal defense forts. As the threat changed from big-gunned ships to bomb-laden aircraft, the Army changed the focus of its defense from coastal forts to anti-aircraft installations around American cities. In World War II, advances in missile technology allowed the threat to surpass existing defensive capabilities.

DESCRIPTORS: *DEFENSE SYSTEMS, *GUIDED MISSILE DEFENSE SYSTEMS, *NATIONAL DEFENSE, CONGRESS, NATIONS, UNITED STATES, DECISION MAKING, LEADERSHIP, ARMY PERSONNEL, ATTACK, INSTALLATION, ANTIAIRCRAFT WEAPONS, HISTORY, GROUND BASED, URBAN AREAS, SECOND WORLD WAR, NMD(NATIONAL MISSILE DEFENSE).

♦ AD-A381874

ARMY COMMAND AND GENERAL STAFF
COLL FORT LEAVENWORTH KS SCHOOL OF
ADVANCED MILITARY STUDIESDoctrine for Domestic Disaster Response
Activities

20 May 2000 59 PAGES

PERSONAL AUTHORS: Wellons, Dave

ABSTRACT: This monograph examines two disasters, Hurricanes Andrew (1991) and Marilyn (1995), and the U.S. Army's support to the Federal Emergency Management Agency (FEMA) to determine whether Joint and Army doctrine provides doctrinal tools for Defense Coordination Element (DCE) planning. Two recent disasters, Hurricanes Andrew and Marilyn, provide detailed lessons learned and after action reports to examine the role of the DCE in planning military activities during federally declared disaster relief operations. First, this monograph begins by discussing the legal and regulatory basis that established the unique relationship between Federal Emergency Management Agency (FEMA) and the military during federally declared disasters. The Federal Response Plan, FEMA's emergency response planning document, outlines the functional coordination and lead agency responsibilities during disaster response and recovery operations. Department of Defense (DoD) Directives and Army regulations provide the Defense Coordinating Officer and his staff the legal basis for military support during these operations. The operational and tactical requirements of the DCE are found by reviewing post incident reports from large-scale disasters such as Hurricane Andrew.

DESCRIPTORS: *MILITARY ASSISTANCE, *EMERGENCIES, *HURRICANES, MILITARY OPERATIONS, DEPARTMENT OF DEFENSE, MILITARY REQUIREMENTS, UNITED STATES GOVERNMENT, DISASTERS, LESSONS LEARNED, MILITARY DOCTRINE, RESPONSE, PLANNING, DOMESTIC, ARMY, TACTICAL WARFARE, REGULATIONS, FEMA(FEDERAL EMERGENCY MANAGEMENT AGENCY), DCE(DEFENSE COORDINATION ELEMENT), HURRICANE ANDREW, HURRICANE MARILYN.

AD-A381851

NAVAL WAR COLL NEWPORT RI

The Missile Technology Control Regime,
American Theater Ballistic Missile Defense Efforts
and CINC Planning In The Middle East and South
Asia

15 May 2000 25 PAGES

PERSONAL AUTHORS: Cuadroado, Joseph F.

ABSTRACT: The United States is expending billions of dollars to obtain reliable Antiballistic Missile Defenses (ABM) at the theater and national levels. The new defenses are designed to meet the expanding threat of Weapons of Mass Destruction (WMD) delivery by missile on the American homeland, American forces overseas, and American allies. The U.S. argues that the development and deployment of ABM defenses is aimed at rogue states, e.g., North Korea, Iran, Iraq, or Libya. The new defenses are designed to be limited and not designed to counter a strike by owners of large missile forces, i.e., Russia or China. At the same time, the U.S. is a member of the Missile Technology Control Regime (MTCR), an international agreement designed to reduce the existing proliferation of Ballistic Missile (BM) capabilities and to contain existing capabilities at present levels. Unfortunately, many allies do not share U.S. concerns for BM proliferation, Russia and China doubt America's professed reasons for ABM defenses, and the MTCR has been unable to prevent the spread of more effective BM technology in the Third World. This all plays a large role in American defense planning, including at the level of the regional Commanders in Chief of U.S. forces (the CINC's) This paper reviews the BM growing threat, the limits of the MTCR, and the impact of both on the regional CINC's.

DESCRIPTORS: *ANTIMISSILE DEFENSE SYSTEMS, WEAPONS, LIBYA, MILITARY FORCES(UNITED STATES), DEVELOPING NATIONS, GUIDED MISSILES, NORTH KOREA, DELIVERY, DEPLOYMENT, IRAQ, UNITED STATES, DEFENSE SYSTEMS, LOADS(FORCES), RELIABILITY, RUSSIA, MASS DESTRUCTION WEAPONS, MILITARY COMMANDERS, DEFENSE PLANNING, INTERNATIONAL RELATIONS, IRAN, ASIA, CHINA, FAR EAST, SOUTH ASIA.

♦ Included in The DTIC® Review, Summer 2001

AD-A381668

NAVAL WAR COLL NEWPORT RI

The Weapons of Mass Destruction Threat,
Homeland Defense, and JFCOM

16 May 2000 30 PAGES

PERSONAL AUTHORS: Faulkner, John M.

ABSTRACT: The national security threats to the United States have changed since the end of the Cold War. Instead of the stable and predictable foe presented by the Soviet Union, there is a multitude of smaller enemies wholly unable to compete on the battlefield. During a confrontation with the United States, these lesser adversaries may choose to use Weapons of Mass Destruction in an asymmetrical attack on the American homeland. This attack may be indistinguishable from a terrorist attack, making offensive response-in-kind virtually impossible. During the 1990s there has been a great deal of attention focused on how the United States can best confront this new threat. Deterrence is best accomplished with a combination of counter proliferation and consequence management. Executive directives and congressional legislation have focused on using domestic civil response capabilities as the primary tool with the military in the supporting role. This methodology is in keeping with the American tradition of keeping the military removed from domestic activities. But the magnitude of the impact a WMD event will have on American society dictates military involvement to effectively deter and, if necessary, respond in the aftermath of such an attack. To adequately address the danger posed by a WMD attack the U.S. military needs to have dedicated active-duty alert forces assigned to a standing Joint Task Force (JTF). Legislation to relieve the military of Posse Comitatus restraints is also needed.

DESCRIPTORS: *NATIONAL SECURITY, *CRISIS MANAGEMENT, *CIVIL DEFENSE, *DEFENSE SYSTEMS, *MASS DESTRUCTION WEAPONS, *DETERRENCE, WEAPONS, NUCLEAR PROLIFERATION, USSR, MILITARY REQUIREMENTS, THREATS, BATTLEFIELDS, TASK FORCES, RESPONSE, COLD WAR, ENEMY, DOMESTIC, CIVIL AFFAIRS, COUNTERTERRORISM, LEGISLATION, TERRORISM, CONFRONTATION, JTF(JOINT TASK FORCE).

AD-A381637

NAVAL WAR COLL NEWPORT RI JOINT
MILITARY OPERATIONS DEPT

Homeland Defense and Response to Weapons of
Mass Destruction: Are National Guard Civil
Support Teams a Necessary Asset or Duplication
of Effort

16 May 2000 25 PAGES

PERSONAL AUTHORS: McBride, Kevin R.

ABSTRACT: The 1995 Oklahoma City bombing maximized America's awareness of its vulnerability to terrorist activities, and erased the nation's sense of security that terrorist attacks could not occur within the United States. As a result, the possibility of such bombings, to include Weapons of Mass Destruction (WMD), could no longer be ignored. In May 1998, the president issued Presidential Decision Directive (PDD) 62, which established policy and assigned responsibilities for responding to homeland attacks. It directed the Department of Justice (FBI) to assume the lead for such circumstances and it also identified the National Guard as playing an important role in this program. The National Guard established Civil Support Teams in each of the ten FEMA regions to assist state and local first responders in a WMD incident. In May 1999, a US General Accounting Office report on federal government efforts to combat terrorism indicated that the role of National Guard Civil Support Teams remained unclear and there is significant redundancy in response capabilities. This paper examines whether there is a continued need for the National Guard Civil Support Teams, and explains how they fit into Federal, State, and local response plans.

DESCRIPTORS: *NATIONAL SECURITY, *CIVIL DEFENSE, NATIONAL GUARD, DECISION MAKING, DESTRUCTION, VULNERABILITY, JOINT MILITARY ACTIVITIES, DEFENSE PLANNING, AWARENESS, BOMBING, CIVIL DISTURBANCES, DOMESTIC TERRORISM, DOMESTIC TERRORISM PROGRAM.

AD-A381616

NAVAL WAR COLL NEWPORT RI JOINT
MILITARY OPERATIONS DEPT

Operational Command and Control of Federal
Domestic Emergency Response Operations

16 May 2000 30 PAGES

PERSONAL AUTHORS: Richey, Sharon K.

ABSTRACT: In the past 50 years, the federal role in emergency response operations to larger-scale disasters has increased and so have the related Command and Control (C2) challenges. Large-scale federal domestic emergency response is comparable to the operational level of war in which C2 is one of the most important functions. At present no national standard C2 organization and system is mandated for domestic emergency responses. This paper recommends that the Incident Command System (ICS) be mandated as the national, all-hazard, all-risk command and control system for all domestic emergency response operations. This paper reviews recent disaster responses, explores the advantages using the Incident Command System as a C2 system for response operations and provides recommendations to further improve emergency responses at the operational level.

DESCRIPTORS: *CRISIS MANAGEMENT, *EMERGENCIES, *RESPONSE, *DOMESTIC EMERGENCY RESPONSE, MILITARY OPERATIONS, UNITED STATES GOVERNMENT, DISASTERS, COMMAND AND CONTROL SYSTEMS, DOMESTIC, ICS(INCIDENT COMMAND SYSTEM).

AD-A381483

EDGEWOOD CHEMICAL BIOLOGICAL
CENTER ABERDEEN PROVING GROUND MD

Domestic Preparedness Program: Testing of
Photovac MicroFID Handheld Flame Ionization
Detectors against Chemical Warfare Agents.

01 May 2000 18 PAGES

PERSONAL AUTHORS: Longworth, Terri L.;
Barnhouse, Jacob L.; Ong, Kwok Y.; Johnson,
Marcia A.

ABSTRACT: This report characterizes the Chemical Warfare (CW) agent detection potential of the commercially available Photovac MicroFID Handheld Flame Ionization Detector. These detectors were tested against HD, GB, and GA vapor at various conditions. This report is intended to provide the emergency responders concerned with CW agent detection an overview of the detection capabilities of these detectors.

DESCRIPTORS: *CHEMICAL AGENT DETECTORS, VAPORS, MUSTARD AGENTS, HAND HELD, NERVE AGENTS, CHEMICAL WARFARE AGENTS, GA AGENT, GB AGENT, HD AGENT, PHOTOVAC MICROFID, FID(FLAME IONIZATION DETECTOR), *FLAME IONIZATION DETECTORS, DOMESTIC PREPAREDNESS.

AD-A380683

RAND ARROYO CENTER SANTA MONICA
CA

The City's Many Faces

14 Apr 1999 680 PAGES

PERSONAL AUTHORS: Glenn, Russell W.;
Cherry, Geri; Davis, Lois M.; Edwards, Sean J.;
Isensee, Ernst

ABSTRACT: On April 13-14, 1999, the RAND Arroyo Center, Marine Corps Warfighting Lab (MCWL), and J8 Urban Working Group (UWG) Co-hosted a conference on military urban operations in the Joint Military Intelligence College auditorium, Bolling Air Force Base, Washington, D.C. The conference sought to provide a forum for information exchange and debate on the complete range of possible operations in urban areas likely to challenge U.S. national interests in the next generation. Such activities could include: * Operations at the strategic, operational, and tactical levels of war * Domestic and international events * Combat, stability, and support missions * Service, joint, multinational, and interagency concerns Homeland defense and WMD issues.

DESCRIPTORS: *MILITARY OPERATIONS,
*SYMPOSIA, *INFORMATION EXCHANGE,
*URBAN AREAS, MILITARY INTELLIGENCE,
LOGISTICS SUPPORT, MISSIONS,
UNIVERSITIES, AIR FORCE FACILITIES.

AD-A380359

EDGEWOOD CHEMICAL BIOLOGICAL
CENTER ABERDEEN PROVING GROUND MD

Domestic Preparedness Program: Testing of
Photovac MicroFID Handheld Flame Ionization
Detectors Against Chemical Warfare Agents

01 Jul 2000 20 PAGES

PERSONAL AUTHORS: Longworth, Terri L.;
Barnhouse, Jacob L.; Ong, Kwok Y.; Johnson,
Marcia A.

ABSTRACT: The commercially available Photovac MicroFID Handheld Flame Ionization Detector was tested against HD, GB, and GA vapor at various conditions. This report characterizes the Chemical Warfare (CW) agent detection potential of these detectors. It is intended to provide the emergency responders concerned with CW agent detection an overview of these detectors' characteristics based on results of the evaluation.

DESCRIPTORS: *CHEMICAL AGENT
DETECTORS, PORTABLE EQUIPMENT,
VAPORS, IONIZATION, GALLIUM, FLAMES,
HAND HELD, CHEMICAL WARFARE
AGENTS, GA AGENT, GB AGENT, HD
AGENT, FLAME IONIZATION, DOMESTIC
PREPAREDNESS PROGRAM, PHOTOVAC.

AD-A380282

SOLDIER AND BIOLOGICAL CHEMICAL
COMMAND ABERDEEN PROVING GROUND
MD

A Proposed Template of BW Response

23 Jun 1999 21 PAGES

PERSONAL AUTHORS: Walther, John;
Crawford, Chuck; Marvin, Freeman; Hayes, Susan

ABSTRACT: The Domestic Preparedness Program finds initiatives to improve the ability of U.S. communities to respond more effectively to terrorism by Weapons of Mass Destruction. One of these initiatives is the Biological Weapons (BW) Improved Response Program. This program is developing a response template for cities to tailor and incorporate into their emergency response plans for use in case of an incident involving biological agents. The response template consists of a number of components, such as command and control, epidemiological investigation, and several medical response components. This paper describes the proposed BW response template and a validation process using decision analysis methods and tools. The paper then shows how the validation process will be used to evaluate one of the template components: the Neighborhood Emergency Help Center (NEHC).

DESCRIPTORS: *CIVIL DEFENSE,
*BIOLOGICAL WARFARE, *DEFENSE
PLANNING, CRISIS MANAGEMENT,
EMERGENCIES, DECISION MAKING,
COMMUNITIES, PREPARATION, COMMAND
AND CONTROL SYSTEMS, CHEMICAL
ORDNANCE, TERRORISM, BIOLOGICAL
WEAPONS, NEHC(NEIGHBORHOOD
EMERGENCY HELP CENTER), DOMESTIC
PREPAREDNESS.

AD-A380125

ARMY WAR COLL CARLISLE BARRACKS PA

Employment of the Reserve Medical Force in
Consequence Management/WMD

01 May 2000 40 PAGES

PERSONAL AUTHORS: Baker, James M.

ABSTRACT: Although the end of the cold war brought promises of a new world order, terrorism in the next century presents a potentially more lethal and complex threat to the continental United States. This paper addresses three areas. First, the emerging threats and motives for use of Weapons of Mass Destruction will be examined. Second, several Presidential Decision Directives and DoD Directives and actions required by Public Laws will be reviewed. Finally, the types of medical force structure in each of the Reserve components and their capabilities to respond to weapons of mass casualties will be examined. The Department of Defense will play a major role in the domestic response to weapons of mass casualties. The emerging threats and motives for use of weapons of mass casualties strongly support the further use of the reserve components when the demand placed on the Healthcare System following a WMD incident is unprecedented. Although the Army National Guard and Air Guard have early deploying capabilities to respond to a WMD incident, most reserve components do not have adequate deployable medical systems at home station" nor do they possess complete support requirements to respond to a domestic WMD incident when they will be needed.

DESCRIPTORS: *MILITARY PLANNING,
*INTERNATIONAL RELATIONS, MILITARY
RESERVES, MILITARY STRATEGY,
DECISION MAKING, THREATS, MILITARY
MEDICINE, COLD WAR, CASUALTIES, MASS
DESTRUCTION WEAPONS, MEDICAL
SERVICES, TERRORISM, STRATEGY
RESEARCH PROJECT.

AD-A380035

GENERAL ACCOUNTING OFFICE
WASHINGTON DC NATIONAL SECURITY
AND INTERNATIONAL AFFAIRS DIV

Combating Terrorism: Linking Threats to
Strategies and Resources

26 Jul 2000 15 PAGES

ABSTRACT: Intelligence and law enforcement agencies continuously assess the foreign and domestic terrorist threats to the United States. To be considered a threat, a terrorist group must not only exist, but have the intention and capability to launch attacks. The U.S. foreign intelligence community, which includes the Central Intelligence Agency (CIA), the Defense Intelligence Agency, and the State Department's Bureau of Intelligence and Research, monitors the foreign-origin terrorist threat to the United States. In addition, the Federal Bureau of Investigation (FBI) gathers intelligence and assesses the threat posed by domestic sources of terrorism. According to the U.S. intelligence community, conventional explosives and firearms continue to be the weapons of choice for terrorists. The intelligence community (both foreign and domestic agencies) reports an increased possibility that terrorists may use CBRN agents in the next decade.

DESCRIPTORS: *TERRORISM, MILITARY INTELLIGENCE, MILITARY STRATEGY, UNITED STATES, THREATS, MILITARY PLANNING, DOMESTIC TERRORISM, GAO REPORTS.

AD-A379869

BATTELLE MEMORIAL INST BEL AIR MD

Biological Warfare Improved Defense Program
Response Decision Tree Workshop, 29-30 April
1999

01 Jun 2000 18 PAGES

PERSONAL AUTHORS: Perkins, Philip H.

ABSTRACT: This report summarizes the results of a workshop held to enhance the Biological Warfare Improved Response Program template.

DESCRIPTORS: *BIOLOGICAL WARFARE, MILITARY OPERATIONS, INTEGRATED SYSTEMS, NATIONAL SECURITY, CRISIS MANAGEMENT, EMERGENCIES, SAFETY, BIOLOGICAL WARFARE AGENTS, TERRORISM, BW IRP(BIOLOGICAL WEAPONS IMPROVED RESPONSE PROGRAM), BIOLOGICAL TERRORISM, DOMESTIC PREPAREDNESS.

AD-A378707

NAVAL WAR COLL NEWPORT RI

Recent Amendments to the Foreign Sovereign Immunities Act: Strategic Tool, Cruel Hoax, or Untenable Impediment to Foreign Policy

08 Feb 2000 27 PAGES

PERSONAL AUTHORS: Ward, Brendan F.

ABSTRACT: Paper considers whether recently amended Foreign Sovereign Immunities Act constitutes viable strategic tool in combating terrorism, or whether it is domestic law giving plaintiffs judgments they might never recover on or, lastly, that it might be a strategic tool, but one too troublesome in terms of foreign policy to be useful to government strategists. Paper concludes with judgment that a better strategic mechanism would allow an international judicial body to hear cases based on an UN treaty, thereby reducing strains on comity and reciprocity resulting from having domestic law impact international relations. Conclusion is based on recent trends and developments in international law, as well as need for government to resolve inconsistency in terms of putting interests of U.S. citizens in opposition to national foreign policy concerns.

DESCRIPTORS: *FOREIGN POLICY, *TERRORISM, *INTERNATIONAL LAW, POLICIES, UNITED STATES GOVERNMENT, STRATEGY, TREATIES, DOMESTIC, JUDGEMENT(PSYCHOLOGY), INTERNATIONAL RELATIONS, LITIGATION, FOREIGN SOVEREIGN IMMUNITIES ACT.

AD-A378696

EDGEWOOD CHEMICAL BIOLOGICAL CENTER ABERDEEN PROVING GROUND MD

Domestic Preparedness: Sarin Vapor Challenge and Corn Oil Protection Factor (PF) Testing of Powered Air Purifying Respirator (PAPR) Systems and Cartridges

01 Apr 2000 29 PAGES

PERSONAL AUTHORS: Campbell, Lee E.; Pappas, Alex G.

ABSTRACT: Under the Domestic Preparedness (DP) Expert Assistance Personal Protective Equipment (PPE) Evaluation Program, The U.S. Army Edgewood Chemical Biological Center (ECBC) was tasked to perform testing of commercial Powered Air Purifying Respirator (PAPR) Systems and Cartridges. The following three tests were conducted: (1) Sarin breakthrough testing of cartridges; (2) Sarin breakthrough of cartridges and face piece seals using a manikin headform equipped with simulated-breathing pumps while the respirators were powered; and (3) corn oil protection factor (PF) testing of PAPR systems using human subjects. Cartridges and PAPR systems from six manufacturers were tested. The chemical agent test results were that no breakthrough was observed with any of the cartridges or PAPR systems. The PF testing results were that all six PAPR systems met the positive pressure requirement of 100% pass at the 10,000 PF level. In the negative pressure tests, one PAPR system failed the U.S. army requirement of 10,000 PF level.

DESCRIPTORS: *AIR, *PURIFICATION, *CHEMICAL AGENTS, *GB AGENT, *PROTECTIVE MASKS, *RESPIRATORS, *CARTRIDGES, *DOMESTIC PREPAREDNESS, *SARIN VAPOR CHALLENGE, *CORN OIL, PF(PROTECTION FACTOR), *PAPR(POWERED AIR PURIFYING RESPIRATOR), TEST AND EVALUATION, CONTAMINANTS, NERVE AGENTS, CHEMICAL AGENT DETECTORS, BREATHING PUMPS, FIT FACTOR, POSITIVE PRESSURE, GEOMETRIC MEAN, FILTER CARTRIDGES, MINICAMS(MINIATURE AUTOMATIC CONTINUOUS AIR MONITORING SYSTEM).

AD-A378214

ARMY WAR COLL CARLISLE BARRACKS PA

An Analysis of Current United States Homeland Defense Policies

06 Apr 2000 24 PAGES

PERSONAL AUTHORS: Mayes, Kelly L.

ABSTRACT: For the first time in many years the United States must re-consider its homeland defense policies. Gone are the days when deterrence was the only policy required. The emergence of the United States as the sole remaining world superpower has forced it to become more involved in international affairs. This involvement results in the alienation of other nations and non-state actors who are unable to directly challenge the United States and its policies. Technological advances coupled with rapid globalization provide these potential enemies a myriad of capabilities to either directly attack the United States homeland or to use the threat of attack to shape its policies. Among the capabilities potential enemies may use are terrorism, ballistic missiles, cruise missiles, WMD, and cyber attacks. These capabilities are inexpensive, readily available; difficult to detect prior to an attack, and nearly impossible to assign responsibility for the attack once they are employed. The United States currently has or is in the process of developing numerous policies and programs in an effort to counter these threats. But to date the result has been the creation of a myriad of laws, policies and programs that fail; to assign an overall lead agency; are fragmented; that fail to address all the potential threats. Critical to this development of a homeland defense policy for the United States is the determination of what roll the armed forces should play. Some officials want the armed forces to create a command charged with overall responsibility for homeland defense. But this idea dismays many senior military leaders who want to focus on war fighting and many civilians who are concerned that giving the mission to the armed forces might undermine the concept of civilian rule. The end result is that currently the United States has no overarching policy to ensure the protection of its homeland and its citizens.

DESCRIPTORS: *FOREIGN POLICY, *NATIONAL DEFENSE, *DEFENSE POLICIES, GUIDED MISSILES, MILITARY PERSONNEL, WARFARE, UNITED STATES, POLICIES, LEADERSHIP, THREATS, CRUISE MISSILES, ENEMY, INTERNATIONAL RELATIONS, TERRORISM, HOMELAND DEFENSE.

AD-A378197

ARMY WAR COLL CARLISLE BARRACKS PA

Countering the Biological Weapons Threat to the Homeland

10 Apr 2000 26 PAGES

PERSONAL AUTHORS: Barth, Perry E.

ABSTRACT: The United States is ill prepared and naive to the possibilities and consequences of the threat of an attack against the homeland by a biological Weapon of Mass Destruction (WMD). Due to the vast amount of information regarding the development and employment of these weapons, the technical and scientific challenges to creating these weapons no longer exist. Biological warfare is the deliberate spreading of disease among humans, animals, and plants. Biological warfare agents include both living microorganisms (bacteria, protozoa, rickettsia, viruses, and fungi), and toxins (chemicals) produced by microorganisms, plants, or animals. Biological agents have been used as weapons of war for thousands of years. Many nations and terrorists groups now have the capability to attack the homeland with a biological weapon. Current defense measures for WMD do not adequately address the unique problems in countering the biological threat. Efforts must be made to increase our intelligence gathering capabilities and to develop broad-spectrum anti-bacterial and anti-viral compounds capable of protecting against a wide range of pathogens. While the United States may never be able to prevent an attack by a persistent terrorist or belligerent state, we can significantly reduce the likelihood of an attack and the resulting effects.

DESCRIPTORS: *BIOLOGICAL WARFARE, *MASS DESTRUCTION WEAPONS, UNITED STATES, THREATS, HISTORY, BIOLOGICAL WARFARE AGENTS, TERRORISM.

AD-A377658

ARMY WAR COLL CARLISLE BARRACKS PA

The Department of Defense's Preparation to Support Domestic Emergencies as a U.S. Vital Interest

10 Apr 2000 31 PAGES

PERSONAL AUTHORS: Crook, Kenneth R.

ABSTRACT: Emerging threats of terrorism and WMD pose the greatest danger to U.S. vital interests at home over the next 20 years. DoD is actively engaged in Military Assistance to Civil Authorities (MACA) and its role is growing. The frequent use of military forces in supporting domestic operations and the growing probability of asymmetrical threats directed against the territory and citizens of the United States requires a significantly increased emphasis on the military's role to support MACA. Despite recent changes to improve DoD structure and control of MACA, DoD remains unprepared to respond to domestic disasters and the emerging threats to our homeland. This paper examines emerging threats to U.S. vital interests at home, reviews current policies, describes the complex and fragmented procedures for providing MACA, and makes recommendations to improve DoD's ability to provide MACA in order to enhance security at home. This paper recommends transferring executive agency responsibility to CINCUSJFCOM as the single agency to coordinate MACA policy, planning and response; that DoD adopt MACA as a core mission in order to program and resource requirements, that the National Strategy address both conventional and asymmetric threats to our nation, and that the National Guard adopt this larger role for MACA.

DESCRIPTORS: *DEPARTMENT OF DEFENSE, *POLICIES, *MILITARY ASSISTANCE, *EMERGENCIES, *DOMESTIC, *MILITARY PLANNING, REQUIREMENTS, NATIONAL GUARD, UNITED STATES, DISASTERS, STRATEGY, DEFENSE SYSTEMS, PREPARATION, THREATS, PROBABILITY, SECURITY, CONVENTIONAL WARFARE, MISSIONS, RESOURCES, TERRORISM.

AD-A377636

ARMY WAR COLL CARLISLE BARRACKS PA

Accessing the Reserve Components in Response to Attacks Involving Weapons of Mass Destruction

04 Apr 2000 25 PAGES

PERSONAL AUTHORS: Threat, Cary T.

ABSTRACT: The threat of terrorist attacks against United States (U.S.) interests has become a high-priority national security concern. These threats come from unconventional, asymmetrical, and transnational sources. The objective of these attacks is to inflict the greatest amount of death and destruction for the least investment in materials and manpower. The terrorists employ Weapons of Mass Destruction because of their effectiveness in achieving this end. The US government has enacted legislation to meet this threat and placed the Department of Defense (DoD) at the forefront of these measures. One of DoD's most significant actions was the decision to integrate the Reserve Components (RC) into the domestic response of managing the consequences of attacks involving Weapons of Mass Destruction. Many challenging issues arise related to accessing the Reserve Components for employment in this mission. These issues involve all of the force integration functional areas. This paper investigates structuring, training, and deploying. Also discussed is the fundamental issue of missioning of RC forces for CoM requirements. This paper will explore these issues and present some recommendations for changes in these force integration functional areas. These changes will facilitate the ultimate objective of accessing and employing trained and ready RC forces in this new and vital aspect of military assistance to civilian authorities.

DESCRIPTORS: *MASS DESTRUCTION WEAPONS, TERRORISTS, MILITARY RESERVES, DEPARTMENT OF DEFENSE, MILITARY STRATEGY, NATIONAL SECURITY, THREATS, MANPOWER, MILITARY TACTICS, LEGISLATION, TERRORISM, STRATEGY RESEARCH PROJECT.

AD-A376752

GENERAL ACCOUNTING OFFICE
WASHINGTON DC NATIONAL SECURITY
AND INTERNATIONAL AFFAIRS DIVCombating Terrorism: Comments on Bill H.R.
4210 to Manage Selected Counterterrorist
Programs

04 May 2000 34 PAGES

ABSTRACT: Overall, we believe that H.R. 4210 would address some of the problems of fragmentation and duplication that we, and others, have found in programs to combat terrorism. Specifically, the bill would create a new Office of Terrorism Preparedness to centralize leadership and coordination of federal programs to help state and local governments prepare for terrorist incidents involving Weapons of Mass Destruction. However, the duties of the new office, as currently described in the bill, may overlap with some functions of the recently created National Domestic Preparedness Office. Our work on the Office of National Drug Control Policy (ONDCP), on which the Office of Terrorism Preparedness is patterned, suggests that success in achieving the bill's goals depends on the Office head's ability to build consensus among the involved agencies. In addition, the new office may take some time to accomplish its objectives as laid out in the bill. The limited scope of the new statutory office would not address some of the larger problems with fragmented leadership and coordination in federal programs to combat terrorism.

DESCRIPTORS: *TERRORISM, MILITARY INTELLIGENCE, MILITARY OPERATIONS, MILITARY STRATEGY, MASS DESTRUCTION WEAPONS, MILITARY PLANNING, COUNTERTERRORISM, LEGISLATION, ONDCP(OFFICE OF NATIONAL DRUG CONTROL POLICY).

AD-A376515

GENERAL ACCOUNTING OFFICE
WASHINGTON DC NATIONAL SECURITY
AND INTERNATIONAL AFFAIRS DIVCombating Terrorism: Need to Eliminate Duplicate
Federal Weapons of Mass Destruction Training

01 Mar 2000 45 PAGES

ABSTRACT: Concerned that Weapons of Mass Destruction (WMD) are increasingly available to terrorists, Congress passed the Defense Against Weapons of Mass Destruction Act of 1996, commonly known as the Nunn-Lugar-Domenici Act. The act designates the Department of Defense as the lead agency to enhance domestic preparedness for responding to and managing the consequences of terrorists' use of WMD. Under the act, Defense established the Domestic Preparedness Program to provide first responder training focused on terrorist incidents involving chemical, biological, radiological, and nuclear weapons. Congress also passed the Antiterrorism and Effective Death Penalty Act of 1996, which authorizes the Attorney General, in consultation with the Director of the Federal Emergency Management Agency (FEMA), to provide specialized training and equipment for enhancing the capabilities of metropolitan fire and emergency service departments to respond to terrorist attacks. In response, Justice established the Metropolitan Firefighters and Emergency Medical Services Program.

DESCRIPTORS: *TRAINING, *MASS DESTRUCTION WEAPONS, *COUNTERTERRORISM, NUCLEAR WEAPONS, CONGRESS, DEPARTMENT OF DEFENSE, UNITED STATES GOVERNMENT, EMERGENCIES, FIRE FIGHTING, MEDICAL SERVICES, BIOLOGICAL WARFARE AGENTS, CHEMICAL WARFARE AGENTS, RADIOLOGICAL WARFARE AGENTS, GAO(GENERAL ACCOUNTING OFFICE), DEFENSE AGAINST WEAPONS OF MASS DESTRUCTION ACT OF 1996, NUNN-LUGAR-DOMENICI ACT, DOMESTIC PREPAREDNESS, ANTITERRORISM AND EFFECTIVE DEATH PENALTY ACT OF 1996, FIREFIGHTERS AND EMERGENCY MEDICAL SERVICES PROGRAM, TRAINING DUPLICATION.

AD-A376307

ARMY WAR COLL CARLISLE BARRACKS PA

Active Duty And Reserve Component Roles In
America's Homeland Defense

01 Apr 2000 34 PAGES

PERSONAL AUTHORS: Jackson, Michael P.

ABSTRACT: This paper examines all aspects of homeland defense of the United States. First it provides a historical perspective on the Homeland Defense mission and identifies future threats. Each major threat area is then examined to determine what our response should be against that threat, to include identifying specific missions. Each mission is assessed for its compatibility with Active Duty Forces and with Reserve Component Forces using the criteria of trust of the American people, availability of personnel and equipment and the ability to adequately perform the mission. The similarities of the active and reserve capabilities along with their differences are compared to make an argument for the role each should play in providing a strong homeland defense for the United States of America. This paper finally recommends that the National Guard take the lead role in specific homeland defense missions, with follow on forces from the reserve and active duty military services. The special relationship enjoyed with the civilian community by the reserve components should be used to leverage military support to civil authorities.

DESCRIPTORS: *NATIONAL DEFENSE,
MILITARY OPERATIONS, NATIONAL
GUARD, MILITARY RESERVES, MILITARY
STRATEGY, UNITED STATES, NATIONAL
SECURITY, CRISIS MANAGEMENT, CIVIL
DEFENSE, MISSIONS, THREAT
EVALUATION, HISTORY, ACTIVE DUTY,
STRATEGY RESEARCH PROJECT,
HOMELAND DEFENSE MISSION.

AD-A376129

ARMY WAR COLL CARLISLE BARRACKS PA

From Drugs to Bugs: The National Guard's
Expanding Role in the National Security Strategy

15 Mar 2000 24 PAGES

PERSONAL AUTHORS: Bloomquist, Robert D.

ABSTRACT: The National Guard continues to expand its role in the National Security Strategy with increased involvement in Counter Drug operations and the mission to defend the homeland. This research discusses the National Guard's involvement as a Department of Defense Agency in two of the Nation's biggest concerns, the insidious drug problem and the Asymmetrical Threat of Weapons of Mass Destruction use within the borders of the United States. The status of the National Guard under the individual Governor's control and the natural link between the military and civilian agencies provide a cost effective means to assist in countering the drug problem and reacting to a Weapons of Mass Destruction attack.

DESCRIPTORS: *NATIONAL GUARD,
*NATIONAL SECURITY, *DRUG
INTERDICTION, *COUNTER DRUG
OPERATIONS, DEPARTMENT OF DEFENSE,
MILITARY STRATEGY, MASS
DESTRUCTION WEAPONS.

AD-A374300

NAVAL POSTGRADUATE SCHOOL
MONTEREY CA

Flexibility of the Incident Command System to
Respond to Domestic Terrorism

01 Dec 1999 73 PAGES

PERSONAL AUTHORS: Favero, Gerald T.

ABSTRACT: This thesis argues that the current Incident Command System (ICS) is inadequate for activating the National Guard Military Support Detachment - Rapid Assessment Initial Detection (RAID) Teams, which are vital for responding to domestic terrorism. The current ICS does not allow first responders to contact National Guard units directly during a WMD incident. First responders must send a request via their Emergency Operation Center (EOC), through the State Emergency Management Division (EMD), to the state Governor's office for approval. The Governor can then activate the National Guard to respond to the incident. This process is unnecessarily time-consuming. Serious jurisdictional issues and "turf wars" may emerge between first responders and RAID teams, at precisely the time when close coordination is most necessary. RAID teams should be recognized as operational units, and given the ability to initiate their response plan upon receipt of an alert from the local EOC. With the approval of the RAID team's higher headquarters they may then deploy. Appendix A provides a guide to suggested changes in existing regulations. This thesis also proposes changes in education and training that should help alleviate other problems associated with rapid response, including the risk of jurisdictional conflicts and "Good Samaritan" casualties.

DESCRIPTORS: *NATIONAL SECURITY, *DOMESTIC TERRORISM, MILITARY OPERATIONS, NATIONAL GUARD, QUICK REACTION, UNITED STATES, INTELLIGENCE, EMERGENCIES, RISK, THESES, RESPONSE, MASS DESTRUCTION WEAPONS, PUBLIC SAFETY, DOMESTIC TERRORISM, RAID(RAPID ASSESSMENT INITIAL DETECTION)TEAMS, EMD(EMERGENCY MANAGEMENT DIVISION).

AD-A372298

HOUSTON UNIV TX

The Legal Limitations on Defending the National
Information Infrastructure Against a Cyber Attack

27 May 1999 89 PAGES

PERSONAL AUTHORS: Dhillon, Joe

ABSTRACT: The purpose of this paper is to examine the selected domestic and international legal limitations the ability and authority of the United States Air Force to carry out its unique role in ensuring the security of this country against cyber attacks upon our critical information infrastructures.

DESCRIPTORS: *INFORMATION SYSTEMS, *LAW ENFORCEMENT, *COMPUTER ACCESS CONTROL, INFORMATION EXCHANGE, COMPUTER COMMUNICATIONS, THREAT EVALUATION, TERRORISM, AIR FORCE OPERATIONS.

AD-A370625

NAVAL WAR COLL NEWPORT RI

Operational Organization for Homeland Defense

17 May 1999 18 PAGES

PERSONAL AUTHORS: Karol, Kevin P.

ABSTRACT: In response to the growing threat of terrorism with chemical, biological and nuclear weapons, the United States government has developed a national concept of operations for responding to their use. This concept of operations consists of multiple agencies at the local, state and federal levels reacting to an incident with no clear operational organization for efficient command and control and effective response. A step in the right direction to resolve this potentially critical problem is to develop an organization under a single commander with the responsibility for domestic preparedness, response, and consequence management. Only with the proper command organization and subsequent unity of effort can we ensure the most effective employment of the many forces and resources currently tasked with homeland defense against and response to Weapons of Mass Destruction.

DESCRIPTORS: *NATIONAL SECURITY, *NATIONAL DEFENSE, *HOMELAND DEFENSE, WEAPONS, NUCLEAR WEAPONS, MILITARY OPERATIONS, UNITED STATES GOVERNMENT, CRISIS MANAGEMENT, DEFENSE SYSTEMS, THREATS, COMMAND AND CONTROL SYSTEMS, BIOLOGICAL WARFARE, CHEMICAL ORDNANCE, TERRORISM.

AD-A370350

ARMY COMMAND AND GENERAL STAFF
COLL FORT LEAVENWORTH KS SCHOOL OF
ADVANCED MILITARY STUDIES

National Guard Homeland Defense Division
Filling the Gap in Weapons of Mass Destruction
Defense

27 May 1999 57 PAGES

PERSONAL AUTHORS: Spiese, Melvin G.

ABSTRACT: Weapons of Mass Destruction (WMD) pose a new and significant threat to American security. Congress has tasked DoD to develop capabilities to deal with this threat. In particular, DoD has undertaken programs to train those who will initially respond to a WMD attack (preparedness) and to form units with technical WMD skills to assist in a larger federal relief effort (response). DoD's present concept for preparedness and response is not adequate to provide a long term, comprehensive defense. The preparedness program has a narrow focus and ignores necessary refresher training. The DoD response does little more than add small technical units to the current disaster relief (DR) structure. The DR structure is composed of units dispersed throughout DoD components and commands, and responsible to different authorities. The National Guard can, if properly structured, provide genuine WMD homeland defense. Its inherent strengths and characteristics make it the force of choice for this mission. Its integration with state agencies makes it a model for civil military interagency cooperation, and its infrastructure is a well positioned base to establish a comprehensive WMD defense throughout the nation. The National Guard should be tasked with the WMD Homeland Defense mission. It should reorganize the two combat divisions and separate brigades not apportioned to current war plans into two Homeland Defense (HLD) Divisions. They should be organized, trained and equipped specifically for WMD consequence management, and should become responsible for all military support operations.

DESCRIPTORS: *NATIONAL GUARD, *MASS DESTRUCTION WEAPONS, *NATIONAL DEFENSE, MILITARY OPERATIONS, COMBAT READINESS, MILITARY CAPABILITIES, THREAT EVALUATION, MILITARY PLANNING.

AD-A370311

ARMY COMMAND AND GENERAL STAFF COLL
FORT LEAVENWORTH KS SCHOOL OF
ADVANCED MILITARY STUDIES

The Campaign for Homeland Defense--What Do We
Really Need

27 May 1999 49 PAGES

PERSONAL AUTHORS: Bucy, Russell A.

ABSTRACT: Since the end of the Cold War, American military planners, government officials and the public have been engaged in intense discussions about the nature of the next threat. Chemical and biological weapons and their effect on where Americans live--the homeland, have occupied a significant part of the debate. The Defense Against Weapons of Mass Destruction (WMD) Act of 1996, better known as the Nunn-Lugar-Dominici Act, tasks the Federal Government with preventing and responding to terrorist incidents involving chemical and biological WMD, and providing enhanced support to improve the capabilities of civilian emergency response. The Department of Defense has responded by creating small, widely scattered response teams. The military response force mission is to support local emergency response teams and provide advice and coordination during WMD contingencies. This program is ineffective, as military teams cannot respond fast enough to be of assistance in a chemical or biological attack. Further study of the nature and effects of the chemical and biological threat indicate military response teams may be a wasted resource due to their late arrival on the scene and potency of the actual attack. However, the role of the military is important in providing training and development programs for civilian first response teams. To align the DoD mission more closely with the intent of the Nunn-Lugar Dominici Act, the conversion of the 470 military response positions to civil defense training positions is proposed. The proposed training program recalls the successfully cooperative efforts of the World War II era War Department Chemical Warfare Service and the Civil Defense program, which used 323 training personnel at 12 sites to train over two million American civil defense first responders.

DESCRIPTORS: *EMERGENCIES, *CIVIL DEFENSE, *DEFENSE SYSTEMS, *TERRORISM, WEAPONS, DEPARTMENT OF DEFENSE, UNITED STATES GOVERNMENT, TRAINING, THREATS, DESTRUCTION, RESPONSE, MISSIONS, COLD WAR, BIOLOGICAL WARFARE, CHEMICAL WARFARE, DOMESTIC, CHEMICAL ORDNANCE, SECOND WORLD WAR.

AD-A369727

GENERAL ACCOUNTING OFFICE WASHINGTON
DC NATIONAL SECURITY AND INTERNATIONAL
AFFAIRS DIV

Combating Terrorism Observations on the Threat of
Chemical and Biological Terrorism

20 Oct 1999 10 PAGES

PERSONAL AUTHORS: Hinton, Henry L., Jr

ABSTRACT: According to the experts we consulted, in most cases terrorists would have to overcome significant technical and operational challenges to successfully make and release chemical or biological agents of sufficient quality and quantity to kill or injure large numbers of people without substantial assistance from a state sponsor. With the exception of toxic industrial chemicals such as chlorine, specialized knowledge is required in the manufacturing process and in improvising an effective delivery device for most chemical and nearly all biological agents that could be used in terrorist attacks. Moreover, some of the required components of chemical agents and highly infective strains of biological agents are difficult to obtain. Finally, terrorists may have to overcome other obstacles for a successful attack, such as unfavorable environmental conditions and personal safety risks. The President's fiscal year 2000 budget proposes \$ 10 billion for counterterrorism programs--an increase of more than \$3 billion over the requested funding of \$6.7 billion for fiscal year 1999. To assess whether the government is spending appropriate levels on counterterrorism and spending these funds on the most appropriate programs, policymakers need the best estimates of the specific threats the U.S. faces. The intelligence community has recently produced estimates of the foreign- origin terrorist threat involving chemical and biological weapons. However, the intelligence community has not produced comparable estimates of the domestic threat. In our report we recommended that the FBI prepare these estimates and use them in a national-level risk assessment that can be used to identify and prioritize the most effective programs to combat terrorism. The FBI agreed.

DESCRIPTORS: *PLANNING PROGRAMMING BUDGETING, *COUNTERTERRORISM, *DOMESTIC TERRORISM, MILITARY INTELLIGENCE, TERRORISTS, NATIONAL SECURITY, KILL PROBABILITIES, THREATS, BIOLOGICAL WARFARE, CHEMICAL AGENTS, FISCAL POLICIES, GAO(GENERAL ACCOUNTING OFFICE).

AD-A367512

DEPARTMENT OF DEFENSE WASHINGTON
DC

Reserve Component Employment Study 2005

01 Jul 1999 132 PAGES

PERSONAL AUTHORS: Wormuth, Christine

ABSTRACT: In April 1998, Secretary of Defense William S. Cohen issued the Fiscal Years 2000-2005 Defense Planning Guidance, which directed the Department to conduct the Reserve Component Employment 2005 (RCE-05) Study. The study reviewed employment of the Reserve Component (RC), and developed several Recommendations to enhance the role of the RC in the full range of military missions from homeland defense to Major Theater Wars (MTWs). The study examined how to make the RC easier to access and use, and how to better train, equip, and manage it to ensure effective mission fulfillment. In examining the RC role in the future, the RCE-05 Study focused on three areas: homeland defense, smaller-scale contingencies, and MTWs. While the study evaluated several initiatives in each area, certain key themes emerged as particularly important to ensuring an effective future Total Force.

DESCRIPTORS: *MILITARY RESERVES, *THEATER LEVEL OPERATIONS, *DEFENSE PLANNING, MILITARY OPERATIONS, MILITARY STRATEGY, OPERATIONAL EFFECTIVENESS, MISSIONS, AQU99-11-2013, AUDIT REPORTS, RCE 05(RESERVE COMPONENT EMPLOYMENT 2005).

AD-A364711

GENERAL ACCOUNTING OFFICE
WASHINGTON DC NATIONAL SECURITY
AND INTERNATIONAL AFFAIRS DIV

Combating Terrorism: Observations on Growth in
Federal Programs

09 Jun 1999 23 PAGES

PERSONAL AUTHORS: Gebicke, Mark E.

ABSTRACT: U.S. intelligence agencies continuously assess both the foreign and domestic terrorist threat to the United States and note that conventional explosives and firearms continue to be the weapons of choice for terrorists. Terrorists are less likely to use chemical and biological weapons than conventional explosives, although the possibility that they may use chemical and biological materials may increase over the next decade, according to intelligence agencies. Agency officials have noted that terrorist use of nuclear weapons is the least likely scenario, although the consequences could be disastrous. Although the intelligence agencies

DESCRIPTORS: *TERRORISTS, *THREATS, *MASS DESTRUCTION WEAPONS, *MILITARY PLANNING, *POLITICAL REVOLUTION, MILITARY INTELLIGENCE, NUCLEAR WEAPONS, OPERATIONAL READINESS, OBSERVATION, EXPLOSIVES, SMALL ARMS, BIOLOGICAL WARFARE, TERRORISM, CHEMICAL WARFARE AGENTS.

AD-A364613

ARMY WAR COLL CARLISLE BARRACKS PA

Military Support to Civil Authorities

10 Apr 1999 45 PAGES

PERSONAL AUTHORS: Cook, John R.

ABSTRACT: Historical precedence and American's compassion for their fellow citizens as well as political necessity prevents Washington from ever turning its back on domestic disaster intervention. Throughout its history the United States Army has played a vital role in domestic relief efforts. Even with this long history of supporting civil authorities senior leaders are not well prepared or knowledgeable about the systems and laws that apply to domestic support operations. The challenge to commanders today is that there are a wide range and constantly changing litany of laws, Presidential Decision Directives, Executive Orders, Department of Defense Directive (DoDD) and regulations that govern military support for domestic relief operations. The complexity and sensitive nature of these operations dictate that senior military leaders assigned to support them understand the legal and regulatory environment they are working in. This paper will examine the laws, policies and Department of Defense Directives that all senior leaders should aware of prior to deploying to support a disaster relief operation.

DESCRIPTORS: *DISASTERS, *MILITARY ASSISTANCE, *CIVIL AFFAIRS, *DISASTER RELIEF, DEPARTMENT OF DEFENSE, POLICIES, EMERGENCIES, DECISION MAKING, LEADERSHIP, SHELTERS, DOMESTIC, DIRECTIVES, LEGISLATION.

AD-A364570

ARMY WAR COLL CARLISLE BARRACKS PA

Combating Domestic Terrorism: Our National Security Priority?

01 Feb 1999 36 PAGES

PERSONAL AUTHORS: Quarles, Terry L.

ABSTRACT: As we approach the 21st century, as the superpower nation of the world, the United States must be prepared to combat the emerging threat of domestic terrorism, a threat that will be employed by both international and domestic terrorist organizations. In anticipation of this, our response to domestic terrorism must incorporate a positive, proactive, and comprehensive program that identifies terrorist organizations and their threat capability, prevents them from committing attacks if possible, yet allows us to respond in a prepared manner, once an attack has occurred. This can be accomplished with an effective counter-terrorism policy that addresses both offensive and defensive measures. This project will focus on terrorist, our efforts to counter terrorist activities, their threat capability, our response, both military and civilian, as well as preparedness. Hopefully we can answer, "Are we really where we need to be, and if not what must we do to get there?"

DESCRIPTORS: *POLITICAL SCIENCE, *DEFENSE SYSTEMS, *STRATEGIC DEFENSE INITIATIVE, *TERRORISM, *POLITICAL REVOLUTION, UNITED STATES, NATIONAL SECURITY, THREATS, COMBAT READINESS, OPERATIONAL READINESS, RESPONSE, INTERNATIONAL RELATIONS.

AD-A364119

ARMY WAR COLL CARLISLE BARRACKS PA

The National Guard's Role in a Weapons of Mass Destruction Incident

05 Apr 1999 44 PAGES

PERSONAL AUTHORS: Finn, Robert L.

ABSTRACT: In the aftermath of the Cold War, the United States may well be facing its most formidable enemy. The enemy is a faceless individual or group, which has determined the only way the United States will understand their viewpoint, is through the calculated and indiscriminate use of violent acts. Unfortunately, these acts now include the potential to use a Weapon of Mass Destruction (WMD) device. The defining domestic attack that caused the United States to review their laws and policies concerning terrorism occurred on April 19, 1995, in Oklahoma City, OK. The National Guard initially established a Rapid Assessment and Initial Detection (RAID) Element in each of the ten FEMA Regions to assist first responders in a WMD incident. This strategic research paper will identify shortfalls in the existing National Guard policy and provide a more cost effective RAID Element manning model to best support the first responders' needs, and retain the National Guard's inherent responsibility to be the Nation's first military.

DESCRIPTORS: *MASS DESTRUCTION WEAPONS, *TERRORISM, MILITARY OPERATIONS, NATIONAL GUARD, MILITARY STRATEGY, POLICIES, COLD WAR, URBAN AREAS, OKLAHOMA, STRATEGY RESEARCH PROJECT.

AD-A364099

ARMY WAR COLL CARLISLE BARRACKS PA

Smell the Coffee: Military Support to Civilian Authorities and Homeland Defense Here and Now.

07 Apr 1999 41 PAGES

PERSONAL AUTHORS: Colpo, Michael

ABSTRACT: The greatest threat to the national security today is the employment of Weapons of Mass Destruction (WMD) on United States soil by a Non-State actor. Despite recent efforts to address and counter this threat, the U.S. remains ill prepared to prevent or respond to such an incident. This paper examines the current state of Military Support to Civilian Authorities (MSCA) and focuses this support' within the context of Homeland Defense. After a brief review of the threat to U.S. security and the current policies and procedures of MSCA in consequence and crisis management, the paper uses real world case studies and exercises to illustrate our inability to deter and respond to a domestic crisis. It recommends a complete restructuring of the command and control systems for MSCA. It suggests giving this mission to a joint headquarters, Title X commander, Commander in Chief, Atlantic Command. Finally, the paper calls for immediate action to fully integrate the efforts of the National Guard into their "first responder" mission.

DESCRIPTORS: *NATIONAL SECURITY, *CIVIL DEFENSE, *HOMELAND DEFENSE, *MILITARY SUPPORT TO CIVILIAN AUTHORITIES, NATIONAL GUARD, UNITED STATES, CRISIS MANAGEMENT, MILITARY ASSISTANCE, DEFENSE SYSTEMS, COMMAND AND CONTROL SYSTEMS, MASS DESTRUCTION WEAPONS, MSCA(MILITARY SUPPORT TO CIVILIAN AUTHORITIES).

AD-A363957

ARMY WAR COLL CARLISLE BARRACKS PA

Domestic Biological Counter-Terrorism Policy,
Are We Doing Enough?

01 Mar 1999 45 PAGES

PERSONAL AUTHORS: Wolf, William T.

ABSTRACT: In June of 1995, President Clinton issued Presidential Decision Directive-39 (PDD-39), U.S. Policy on Counter-Terrorism. This document set the stage for the most recent U.S. policy on Combating Terrorism and identified for the first time the use of biological weapons as Weapons of Mass Destruction (WMD). It also established responsibilities within the government for fighting this threat. "The United States shall give the highest priority to developing effective capabilities to detect, prevent, defeat, and manage the consequences of Nuclear, Biological, and Chemical (NBC) materials or weapons use by terrorist." In February of 1998, in response to Iraqi non-compliance and threats to the stability of the region, U.S. and allied forces deployed to the SWA region. For the first time since the Gulf War, Americans were directly faced with the possibility of biological weapons usage.

DESCRIPTORS: *BIOLOGICAL AGENTS,
*COUNTERTERRORISM, MILITARY
OPERATIONS, POLICIES, MASS
DESTRUCTION WEAPONS, DOMESTIC,
STRATEGY RESEARCH PROJECT, PDD-
39(PRESIDENTIAL DECISION DIRECTIVE-
39).

AD-A363944

ARMY WAR COLL CARLISLE BARRACKS PA

Fast Guns and the Posse Comitatus Act

15 Apr 1999 46 PAGES

PERSONAL AUTHORS: Gallavan, Christopher
G.

ABSTRACT: Transnational threats, such as terrorism and international drug crime, and civil disturbances bode future domestic support operations in the realm of law enforcement for the U.S. military. The reserve components will play a key role in the growing homeland defense mission and will have to be integrated into the mission to provide the United States with an effective deterrent to potential domestic crises. The Posse Comitatus Act (PCA) generally precludes the use of federal forces to perform law enforcement actions. There are numerous constitutional and statutory exceptions to the PCA which allow U.S. military forces to conduct law enforcement operations. This paper examines national and military strategy focused on the homeland defense policy within the context of the ends-ways-means model. Countervailing civil-military relations policy concerns arising out of the PCA are identified and the history of federal forces use under the PCA discussed. Finally recommendations are made for an overarching homeland defense policy.

DESCRIPTORS: *LAW ENFORCEMENT,
MILITARY FORCES(UNITED STATES),
MILITARY RESERVES, MILITARY
STRATEGY, POLICIES, NATIONAL
SECURITY, THREATS, MILITARY
DOCTRINE, TERRORISM, CRIMES, CIVIL
DISTURBANCES, PCA(POSSE COMITATUS
ACT), INTERNATIONAL DRUG CRIME.

AD-A363938

ARMY WAR COLL CARLISLE BARRACKS PA

A Missile Defense for All

07 Apr 1999 43 PAGES

PERSONAL AUTHORS: Trumps, Thomas H.

ABSTRACT: Now, more than sixteen years after the creation of the Strategic Defense Initiative, the United States finds itself at a critical crossroads in determining how best to defend the homeland and deployed military forces against ballistic missile attack. The Department of Defense, and more specifically the Ballistic Missile Defense Organization (BMDO), appears prepared to make the difficult developmental and fielding decisions concerning the Missile Defense systems of the future. These systems will provide both the needed protection to deployed U.S. military forces and a limited defense to the United States well into and beyond the next decade. BMDO must not squander away its opportunity and responsibility to choose those Theater and Air Missile Defense and National Missile Defense systems that will produce the best defense while eliminating costly missile defense programs that show little hope of success. These are important times for Missile Defense.

DESCRIPTORS: *AIR DEFENSE, *ANTIMISSILE DEFENSE SYSTEMS, MILITARY FORCES(UNITED STATES), DEPARTMENT OF DEFENSE, DEPLOYMENT, STRATEGIC DEFENSE INITIATIVE, MILITARY MODERNIZATION, GUIDED MISSILE DEFENSE SYSTEMS, MILITARY BUDGETS, NATIONAL DEFENSE, BMDO(BALLISTIC MISSILE DEFENSE ORGANIZATION), SDI(STRATEGIC DEFENSE INITIATIVE).

AD-A363901

ARMY WAR COLL CARLISLE BARRACKS PA

Defense of Critical Infrastructure

07 Apr 1999 35 PAGES

PERSONAL AUTHORS: Letterman, Lester H.

ABSTRACT: Accompanied by a new play of forces and dynamics, the age of geopolitics is giving way to the age of geoeconomics. Within our national security apparatus a strong tendency still exists to view foreign and domestic problems from a nineteenth century perspective. America's predominant leadership role, national resolve and power are being tested more frequently in a world free of the bipolar constraints of the Cold War. To obtain the desired synergistic relationship among economic, diplomatic, and military elements of power our National Security Strategy must conduct an unambiguous assessment of our interests, threats, and requirements in this emerging world order. The likely near term threats to our security will avoid America's military strengths and be directed toward the more accessible targets, our national resolve and economy. An asymmetric strike against our critical infrastructures seems the most likely means of attack. Electric power, telecommunications and transportation are among those systems whose incapacity or destruction would have a debilitating impact on the defense and economic security of our nation. In recognition of America's dependency and vulnerability, the Department of Defense should be brought center stage in a role of Homeland Defense to protect our national infrastructures. Systems whose incapacity or destruction would have a debilitating impact on the defense and economic security of our nation. In recognition of America's dependency and vulnerability, the Department of Defense should be brought center stage in a role of Homeland Defense to protect our national infrastructures.

DESCRIPTORS: *NATIONAL SECURITY, *NATIONAL DEFENSE, *INFRASTRUCTURE, MILITARY INTELLIGENCE, DEFENSE SYSTEMS, FOREIGN, LEADERSHIP, VULNERABILITY, GEOPOLITICS, TELECOMMUNICATIONS, DOMESTIC, OPERATIONS OTHER THAN WAR, INFORMATION TECHNOLOGY, GEOECONOMICS.

AD-A363878

ARMY WAR COLL CARLISLE BARRACKS PA

A Federal Emergency Response Apparatus: A
Need for Change

06 Apr 1999 44 PAGES

PERSONAL AUTHORS: Sellers, Charles M.

ABSTRACT: In the next decade, the United States, as the only world superpower, will face a strategic environment characterized by significant uncertainty and ambiguity. Inherent in this environment will be new, asymmetric threats to our national security, both at home and abroad. Transnational terrorist and criminal organizations, using the latest technology, will gain increased access and ability to employ Weapons of Mass Destruction (WMD) within our borders. The Federal Response Plan is an over-complicated attempt at coordinating numerous federal departments and agencies for effective response to domestic crisis situations. Early warning and preemption would certainly be the best response to WMD attack, but bureaucratic rivalry within the U.S. Intelligence Community hinders the focus necessary to consistently achieve that goal. This paper examines and recommends changes to the federal domestic crisis response apparatus, in a search for greater efficiency and unity of effort in preparing the nation for WMD attack.

DESCRIPTORS: *NATIONAL SECURITY, TERRORISTS, UNITED STATES GOVERNMENT, MANAGEMENT PLANNING AND CONTROL, STRATEGIC ANALYSIS, THREATS, DESTRUCTION, MASS DESTRUCTION WEAPONS, INTERNATIONAL, CIVILIAN POPULATION, EARLY WARNING SYSTEMS, CIVILIAN TARGETS, FRP(FEDERAL EMERGENCY RESPONSE PLAN), WMD(WEAPONS OF MASS DESTRUCTION).

AD-A363586

ARMY WAR COLL CARLISLE BARRACKS PA

Weapons of Mass Destruction and Domestic Force
Protection: Basic Response Capability for Military,
Police & Security Forces

07 Mar 1999 24 PAGES

PERSONAL AUTHORS: Manto, Samuel E.

ABSTRACT: Weapons of Mass Destruction (WMD) and Force Protection are two critical topics rapidly gaining attention throughout the world. An increasing recognition of the vulnerability of our citizens and of our military forces due to recent terrorist attacks has caused the President of the United States and Congress to take several actions to improve preparedness. This paper examines what a minimum basic response capability for all military, police and security forces should be to ensure at least some chance for their own survival and possible early warning and protection of others in the case of a domestic WMD incident. The capabilities of awareness, protection and detection are studied including the aspects of training and equipment. The paper shows that the WMD threat to America is significant and increasing and makes several recommendations including that all first responders receive training to increase their awareness and understanding of WMD, the adoption nationally of a minimum personal protection equipment standard for first responders to accomplish EPA Level C protection, and the development of a WMD response capability modeled on national level asset capability for all cities, counties, or states.

DESCRIPTORS: *MILITARY FORCES(UNITED STATES), *MASS DESTRUCTION WEAPONS, *SECURITY PERSONNEL, *POLICE, WEAPONS, CONGRESS, UNITED STATES, DETECTION, ATTACK, VULNERABILITY, SURVIVAL(GENERAL), RESPONSE, PROTECTION, RECOGNITION, DOMESTIC, TERRORISM, AWARENESS, URBAN AREAS, EARLY WARNING SYSTEMS.

AD-A363431

EDGEWOOD CHEMICAL BIOLOGICAL
CENTER ABERDEEN PROVING GROUND MD

Domestic Preparedness Program: Test for Mustard
(HD) Liquid Challenge of Hoses for Self-
Contained Breathing Apparatus (SCBA)

01 Mar 1999 13 PAGES

PERSONAL AUTHORS: Sneeringer, Paul V.;
Campbell, Lee E.

ABSTRACT: Under the Domestic Preparedness
Expert Assistance Personal Protection Equipment
Evaluation Program, the U.S. Army Edgewood
Chemical Biological Center was tasked to perform
testing of hoses for the self-contained breathing
apparatus against permeation by liquid mustard
(HD). Seven hoses from each of six manufacturers
were tested using a standard method (MIL-STD-
282, Method 204.1.2). The requirements were that
no HD should permeate the hoses within 1 hr after
the HD challenge was initiated. None of the 42
hoses tested showed any permeation within 1 hr.

DESCRIPTORS: *HD AGENT, *HOSES, TEST
AND EVALUATION, PERMEABILITY,
BIOLOGY, LIQUIDS, SELF CONTAINED,
STANDARDIZATION, MUSTARD AGENTS,
BREATHING APPARATUS, PERMEATION
TEST, DOMESTIC PREPAREDNESS EXPERT
ASSISTANCE PERSONAL PROTECTION
EQUIPMENT EVALUATION PROGRAM,
SCBC(SELF-CONTAINED BREATHING
APPARATUS).

AD-A363349

EDGEWOOD CHEMICAL BIOLOGICAL
CENTER ABERDEEN PROVING GROUND MD

Domestic Preparedness Program: Liquid Sulfur
Mustard and Sarin Challenge/Vapor Penetration
Swatch Testing of Blue Max Hazmat Splash
Clothing Model B

01 Apr 1999 28 PAGES

PERSONAL AUTHORS: Lindsay, Robert S.;
Baranoski, John M.; Hannigan, Janice B.

ABSTRACT: A Blue Max Hazmat suit (Mine
Safety Appliances Co., Pittsburgh, PA) had
swatches taken from five sample positions. These
swatches were tested against sulfur mustard (HD)
and sarin (GB) in accordance with the U.S. Army
Edgewood Research, Development and
Engineering Center's (ERDEC) modified static
diffusion procedure, which was derived from Test
Operations Procedure (TOP) 8-2-501.

DESCRIPTORS: *PROTECTIVE CLOTHING,
*GB AGENT, *HD AGENT, PERMEABILITY,
MODELS, LIQUIDS, TEST METHODS,
DIFFUSION, MUSTARD AGENTS, SULFUR,
STATICS, CHEMICAL PROTECTIVE
CLOTHING, SWATCH TESTING,
PERMEATION TESTING.

AD-A363275

EDGEWOOD CHEMICAL BIOLOGICAL
CENTER ABERDEEN PROVING GROUND MD

Domestic Preparedness Program: Liquid Sulfur
Mustard and Sarin Challenge/Vapor Penetration
Swatch Testing of Kappler CPF3 Coverall, Model
3T436

01 Apr 1999 31 PAGES

PERSONAL AUTHORS: Lindsay, Robert S.;
Longworth, Terri L.; Johnson, Marcia A.

ABSTRACT: A Kappler CPF3 Coverall, Model
3T436 (Kappler Safety Group, Guntersville, AL)
had swatches taken from six sample positions.
These swatches were tested against sulfur mustard
(HD) and sarin (GB) in accordance with the U.S.
Army Edgewood Research, Development and
Engineering Center's (ERDEC) modified static
diffusion procedure, which was derived from Test
Operations Procedure (TOP) 8-2-501.

DESCRIPTORS: *PROTECTIVE CLOTHING,
*GB AGENT, *HD AGENT, TEST AND
EVALUATION, PERMEABILITY, CHEMICAL
CONTAMINATION, LIQUIDS, VAPORS,
SAFETY, DIFFUSION, MUSTARD AGENTS,
SULFUR, CPF3 COVERALL, 3T436,
PERMEATION TESTING.

AD-A363215

NAVAL WAR COLL NEWPORT RI

Operational Design of Hurricane Relief Operations

05 Feb 1999 34 PAGES

PERSONAL AUTHORS: Hishon, William G.

ABSTRACT: Disaster relief operations have, for
many years, been a traditional mission for the
United States armed forces when crises occur
either at home or abroad. Hurricane relief
operations, in particular, have been a significant
mission for the military over the past ten years.
Yet, given the time-critical nature of hurricane
relief operations, military commanders often have
little time to plan for the participation of their
forces. This paper discusses the applicability of
operational design to hurricane relief operations
and draws data from the military's participation in
four domestic operations (Hugo, Andrew, Iniki and
Georges) and two foreign operations (Operation
Sea Angel and Hurricane Mitch) over the past ten
years. The paper explores the elements of
operational design most applicable to hurricane
relief operations and discusses how military
commanders can best incorporate elements of
operational design in executing these operations.
Moreover, the paper explores the various relief
tasks a military commander must design an
operation to accomplish in order to achieve the
mission objective.

DESCRIPTORS: *CRISIS MANAGEMENT,
*DECISION MAKING, *HURRICANES,
*NATURAL DISASTERS, MILITARY
FORCES(UNITED STATES), MILITARY
ASSISTANCE, EMERGENCIES, JOINT
MILITARY ACTIVITIES, MILITARY
PLANNING, DISASTER RELIEF
OPERATIONS.

AD-A363196

NAVAL WAR COLL NEWPORT RI

The Next Convoy War: The American Campaign
Against Enemy Shipping in the Twenty-First
Century

05 Feb 1999 22 PAGES

PERSONAL AUTHORS: Poyer, Jason M.

ABSTRACT: In the coming century, the United States may find herself at war with a determined and capable opponent. A campaign against Orange commercial shipping will be a facet of the strategic warfare waged against this opponent. The Orange nation may attempt to protect her open-ocean trade routes by convoying her merchant vessels, but will find that American naval power in the age of Network Centric Warfare is too powerful to compete with outside the range of land-based support. The Orange nation will be able to exercise a degree of area denial near her shores, using barrier minefield and land-based air and sea defenses. The American forces will have great difficulty in shutting down the littoral trade routes, due partially to the limitations of weapons technology and partially to the shortage of delivery platforms capable of operation in the Orange denial area. Advanced weapons technology could help improve the success rate, as could a greater attention to offensive naval mining capability. To maximize the impact of the anti-shipping campaign, American forces should attack Orange ports directly. The Orange nation will respond to American successes by shifting her domestic transport mechanisms to air- or land-based vehicles where practical. This shifting will reduce the impact of the American anti-shipping efforts, unless the American forces also take steps to eliminate the alternate transport methods. If escalation concerns prevent strikes against the Orange homeland, the war against Orange domestic commerce may not be "winnable" at all.

DESCRIPTORS: *ROUTING, *STRATEGIC WARFARE, *AREA DENIAL, *SHIPPING, WEAPONS, MILITARY FORCES(UNITED STATES), WARFARE, COMMERCE, NAVY, MINEFIELDS, FORECASTING, MINING ENGINEERING, TRANSPORT PROPERTIES, PLATFORMS, LIMITATIONS, BARRIERS, TRANSPORT, ENEMY, MERCHANT VESSELS, ADVANCED WEAPONS.

AD-A363182

NAVAL WAR COLL NEWPORT RI

Axis Offensive Military Operations Against the
Continental United States: Opportunity Lost

05 Feb 1999 22 PAGES

PERSONAL AUTHORS: Micillo, Domenick

ABSTRACT: Research and analysis revealed the Axis offensive against the United States during World War II failed due to the lack of a campaign plan to guide it. The Axis leadership correctly identified U.S. centers of gravity and had the capability to strike them, yet they failed to unify their effort or allocate adequate resources to the offensive. Finally, they failed to act while the opportunity existed in early 1942. The study of this offensive yields many implications for the United States today. These concern contemporary Anti-Submarine Warfare, Mine Countermeasures, terrorism, industrial sabotage, U.S. military focus on the Caribbean and the assignment of responsibility for the homeland defense mission to a regional CINC.

DESCRIPTORS: *MILITARY OPERATIONS, *MILITARY HISTORY, *MILITARY STRATEGY, *ANTISUBMARINE WARFARE, *SECOND WORLD WAR, UNITED STATES, INDUSTRIES, NATIONAL SECURITY, DEFENSE SYSTEMS, LEADERSHIP, MINE COUNTERMEASURES, ATTACK, JAPAN, MISSIONS, RESOURCES, TERRORISM, GERMANY(EAST AND WEST), SABOTAGE.

AD-A363093

NAVAL WAR COLL NEWPORT RI

Shoring Up the Homeland Defense: The Joint Medical Task Force and Weapons of Mass Destruction

05 Feb 1999 31 PAGES

PERSONAL AUTHORS: Feril, Benjamin G.

ABSTRACT: America is no longer safe within her borders. At any time, a determined group of foreign or domestic terrorists will target American citizens and institutions with Weapons of Mass Destruction (WMD) composed primarily of lethal biological or chemical agents. Presently, many of our nation's military and civilian hospitals are not prepared to respond to WMD threats, as the United States Public Health Service (USPHS) is the only line of medical defense against these threats. A layered defensive strategy must be considered as a back-up capability to address gaps in the "WMD medical defense shield." This capability should be created from our armed forces' reserve medical personnel to form Joint Medical Task Forces (JMTF) to augment USPHS capabilities and to assist local community hospitals in the event of a WMD incident.

DESCRIPTORS: *MILITARY OPERATIONS, *MILITARY MEDICINE, *MASS DESTRUCTION WEAPONS, MILITARY FACILITIES, MILITARY STRATEGY, BIOLOGICAL AGENTS, TASK FORCES, DESTRUCTION, JOINT MILITARY ACTIVITIES, CHEMICAL AGENTS, CIVILIAN POPULATION, PUBLIC HEALTH, INTERAGENCY SUPPORT.

AD-A361897

ARMY WAR COLL CARLISLE BARRACKS PA

Combatting Domestic Terrorism: A Strategic Approach for the Twenty-First Century

08 Jan 1999 28 PAGES

PERSONAL AUTHORS: Sienrukos, John C.

ABSTRACT: This paper will examine the United States' current strategic approach to combating domestic terrorism and explore potential recommendations for deterring and defeating it in the twenty-first century. In order to reach sound, strategic recommendations for combating terrorism, the author will begin with some background on terrorism, review the various definitions as defined by the Department of Defense and other agencies, describe the United States' current policies toward combating terrorism, offer an evaluation of prospective measures in the form of pros and cons, and make seven recommendations for implementation.

DESCRIPTORS: *POLICIES, *TERRORISM, TERRORISTS, DEPARTMENT OF DEFENSE, UNITED STATES, CRISIS MANAGEMENT, STRATEGY, DOMESTIC, UNCONVENTIONAL WARFARE, SABOTAGE.

AD-A361601

EDGEWOOD CHEMICAL BIOLOGICAL
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Domestic Preparedness Program: Liquid Sulfur
Mustard and Sarin Challenge/Vapor Penetration
Swatch Testing of Chempruf II Betex Suit

01 Feb 1999 31 PAGES

PERSONAL AUTHORS: Lindsay, Robert S.;
Longworth, Terri L.; Johnson, Marcia A.

ABSTRACT: A Chempruf II Betex suit(Mine
Safety Appliances Company, Pittsburgh, PA) had
swatches taken from six sample positions. These
swatches were tested against sulfur mustard (HD)
and sarin (GB) in accordance with U.S. Army
Edgewood Research, Development and
Engineering Center's (ERDEC) modified static
diffusion procedure, which was derived from draft
Test Operations Procedure (TOP).

DESCRIPTORS: *PROTECTIVE EQUIPMENT,
*PROTECTIVE CLOTHING, *CHEMICAL
WARFARE AGENTS, *GB AGENT, *HD
AGENT, LIQUIDS, TEST METHODS,
ENGINEERING, DIFFUSION, MUSTARD
AGENTS, SULFUR, STATICS, SWATCH
TESTING, PERMEATION TESTING.

AD-A361600

EDGEWOOD CHEMICAL BIOLOGICAL
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Domestic Preparedness Program: Liquid Sulfur
Mustard and Sarin Challenge/Vapor Penetration
Swatch Testing of ILC Chemtursion Suit, Model 13

01 Feb 1999 31 PAGES

PERSONAL AUTHORS: Lindsay, Robert S.;
Baranoski, John M.; Hannigan, Janice B.

ABSTRACT: An ILC Chemtursion suit, Model 13
(ILC Dover Incorporated, Frederica, DE) had
swatches taken from six sample positions. These
swatches were tested against sulfur mustard (HD)
and sarin (GB) in accordance with U.S. Army
Edgewood Research, Development and
Engineering Center's (ERDEC) modified static
diffusion procedure, that was derived from draft
Test Operations Procedure (TOP).

DESCRIPTORS: *PROTECTIVE EQUIPMENT,
*PROTECTIVE CLOTHING, *CHEMICAL
WARFARE AGENTS, *GB AGENT, *HD
AGENT, LIQUIDS, TEST METHODS,
ENGINEERING, DIFFUSION, MUSTARD
AGENTS, SULFUR, STATICS, SWATCH
TESTING, PERMEATION TESTING.

AD-A361598

EDGEWOOD CHEMICAL BIOLOGICAL
CENTER ABERDEEN PROVING GROUND MD

Domestic Preparedness Program: Liquid Sulfur
Mustard and Sarin Challenge/Vapor Penetration
Swatch Testing of Responder CSM Level A
Gastight Protective Suit, Model 50660

01 Feb 1999 31 PAGES

PERSONAL AUTHORS: Lindsay, Robert S.;
Baranoski, John M.; Hannigan, Janice B.

ABSTRACT: A Responder CSM Level A'
Gastight Protective Suit, Model 50660 (Kappler
Safety Group, Guntersville, AL) had swatches
taken from six sample positions. These swatches
were tested against sulfur mustard and sarin in
accordance with U.S. Army Edgewood Research,
Development and Engineering Centers (ERDEC)
modified static diffusion procedure, which was
derived from draft Test Operations Procedure
(TOP) 8-2-501.

DESCRIPTORS: *PROTECTIVE EQUIPMENT,
*PROTECTIVE CLOTHING, *CHEMICAL
WARFARE AGENTS, *HD AGENT, LIQUIDS,
TEST METHODS, ENGINEERING, SAFETY,
DIFFUSION, MUSTARD AGENTS, SULFUR,
STATICS, GB AGENT, SWATCH TESTING,
PERMEATION TESTING.

AD-A361575

EDGEWOOD CHEMICAL BIOLOGICAL
CENTER ABERDEEN PROVING GROUND MD

Domestic Preparedness Program: Liquid Sulfur
Mustard and Sarin Challenge/Vapor Penetration
Swatch Testing of Tychem 9400 Coverall, Model
94150

01 Feb 1999 31 PAGES

PERSONAL AUTHORS: Lindsay, Robert S.;
Longworth, Terri L.; Johnson, Marcia A.

ABSTRACT: A Tychem 9400 Coverall, Model
94150 (Lakeland Industries, Somerville, AL) had
swatches taken from six sample positions. These
swatches were tested against sulfur mustard (HD)
and sarin (GB) in accordance with U.S. Army
Edgewood Research, Development and
Engineering Center's (ERDEC) modified static
diffusion procedure, which was derived from Test
Operations Procedure (TOP) 8-2-501.

DESCRIPTORS: *CHEMICAL AGENTS,
*PROTECTIVE EQUIPMENT, *MUSTARD
AGENTS, *PROTECTIVE CLOTHING,
*VAPOR PROTECTIVE SUIT, INDUSTRIES,
LIQUIDS, TEST METHODS, ENGINEERING,
DIFFUSION, SULFUR, STATICS, GB AGENT,
HD AGENT, PERMEATION TESTING,
SWATCH TESTING.

AD-A361574

EDGEWOOD CHEMICAL BIOLOGICAL
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Domestic Preparedness Program: Liquid Sulfur
Mustard and Sarin Challenge/Vapor Penetration
Swatch Testing of MARMAC Commander Brigade
Ensemble, Style 1000OF91

01 Feb 1999 31 PAGES

PERSONAL AUTHORS: Lindsay, Robert S.;
Longworth, Terri L.; Johnson, Marcia A.

ABSTRACT: A MARMAC Commander Brigade
Ensemble (MARMAC Manufacturing Company,
McBee, SC) had swatches taken from six sample
positions. These swatches were tested against
sulfur mustard and sarin in accordance with U. S.
Army Edgewood Research, Development and
Engineering Center's (ERDEC) modified static
diffusion procedure, which was derived from draft
Test Operations Procedure (TOP).

DESCRIPTORS: *CHEMICAL AGENTS,
*PROTECTIVE EQUIPMENT, *MUSTARD
AGENTS, *PROTECTIVE CLOTHING,
*VAPOR PROTECTIVE SUIT, LIQUIDS, TEST
METHODS, ENGINEERING, DIFFUSION,
SULFUR, STATICS, GB AGENT, HD AGENT,
PERMEATION TESTING, SWATCH TESTING.

AD-A361573

EDGEWOOD CHEMICAL BIOLOGICAL
CENTER ABERDEEN PROVING GROUND MD

Domestic Preparedness Program: Liquid Sulfur
Mustard and Sarin Challenge/Vapor Penetration
Swatch Testing of Tychem 10000 Vapor Protective
Suit, Model 1 1645

01 Feb 1999 31 PAGES

PERSONAL AUTHORS: Lindsay, Robert S.;
Baranoski, John M.; Hannigan, Janice B.

ABSTRACT: Tychem 10000 Vapor Protective
Suit, Model 11645 (Lakeland Industries,
Somerville, AL) had swatches taken from six
sample positions. These swatches were tested
against sulfur mustard (HD) and sarin (GB) in
accordance with U.S. Army Edgewood Research,
Development and Engineering Center's (ERDEC)
modified static diffusion procedure, which was
derived from draft Test Operations Procedure
(TOP) 8-2-501.

DESCRIPTORS: *CHEMICAL AGENTS,
*MUSTARD AGENTS, *PROTECTIVE
CLOTHING, *VAPOR PROTECTIVE SUIT,
INDUSTRIES, LIQUIDS, TEST METHODS,
ENGINEERING, PROTECTIVE EQUIPMENT,
DIFFUSION, SULFUR, STATICS, GB AGENT,
GB(SARIN), PERMEATION.

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